

SOLICITATION, OFFER AND AWARD			1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700)		RATING	PAGE 1 OF 142 PAGES
2. CONTRACT NUMBER DACW67-02-D-1002	3. SOLICITATION NUMBER DACW67-01-R-0001	4. TYPE OF SOLICITATION <input type="checkbox"/> SEALED BID (IFB) <input checked="" type="checkbox"/> NEGOTIATED (RFP)		5. DATE ISSUED 13 Nov 2000	6. REQUISITION/PURCHASE NO. W68MD9-0290-1214	
7. ISSUED BY USA ENGINEER DISTRICT, SEATTLE ATTN: CENWS-CT PO BOX 3755 SEATTLE WA 98124-3755		8. ADDRESS OFFER TO (If other than item 7) SEATTLE DISTRICT, COE ATTN: CENWS-CT PO BOX 3755 SEATTLE WA 98124-3755 OR HANDCARRY TO: Preston Conference Room 4735 E Marginal Way S Seattle, WA 98134				

NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder"

SOLICITATION

9. Sealed offers in original and 8 copies for furnishing the supplies or services in the Schedule will be received at the place specified in Item 8, or if handcarried, in the depository located in 4735 E. Marginal Way South, Seattle, WA 98134 until 1400 local time 31 Jan 2000.

CAUTION — LATE Submissions, Modifications, and Withdrawals: See Section L, Provision No. 52.214-7 or 52.215-1. All offers are subject to all terms and conditions contained in this solicitation.

10. FOR INFORMATION CALL:	A. NAME JANET L. OLSON	B. TELEPHONE (NO COLLECT CALLS)		C. E-MAIL ADDRESS
		206-764-6896	NUMBER EXT.	

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OFFER (Must be fully completed by offeror)

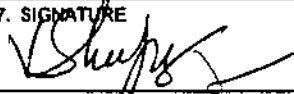
NOTE: Item 12 does not apply if the solicitation includes the provisions at 52.214-16, Minimum Bid Acceptance Period.

12. In compliance with the above, the undersigned agrees, if this offer is accepted within 90 calendar days (60 calendar days unless a different period is inserted by the offeror) from the date for receipt of offers specified above, to furnish any or all items upon which prices are offered at the price set opposite each item, delivered at the designated point(s), within the time specified in the schedule.

13. DISCOUNT FOR PROMPT PAYMENT (See Section I, Clause No. 52.232-8)	10 CALENDAR DAYS %	20 CALENDAR DAYS %	30 CALENDAR DAYS %	CALENDAR DAYS %
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14. ACKNOWLEDGMENT OF AMENDMENTS (The offeror acknowledges receipt of amendments to the SOLICITATION for offers and related documents numbered and dated)	AMENDMENT NO.	DATE	AMENDMENT NO.	DATE
	0001	12-6-00	0004	1-18-01 (See below)
	0002	12-8-00	0005	2-17-01
	0003	1-10-01	0006	2-13-01

15A. NAME AND ADDRESS OF OFFEROR CAGE CODE <u>11STP7</u> ABB Power T&D Company, Inc. 940 Main Campus Drive Raleigh, NC 27606 DUNS#007714574	15B. TELEPHONE NUMBER AREA CODE <u>732</u> NUMBER <u>932-6345</u>	15C. CHECK IF REMITTANCE ADDRESS IS DIFFERENT FROM ABOVE - ENTER SUCH ADDRESS IN SCHEDULE <input type="checkbox"/>	16. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print) VLADIMIR SHULYAKER DIRECTOR, HIGH CURRENT SYSTEMS
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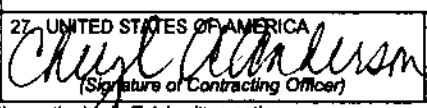
17. SIGNATURE 	18. OFFER DATE REVISED 12/6/01
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AWARD (To be completed by Government)

19. ACCEPTED AS TO ITEMS NUMBERED BASE YEAR	20. AMOUNT Base Year NTE \$10,000,000.00	21. ACCOUNTING AND APPROPRIATION SEE SECTION G
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22. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION: <input type="checkbox"/> 10 U.S.C. 2304(c) () <input type="checkbox"/> 41 U.S.C. 253(c) ()	23. SUBMIT INVOICES TO ADDRESS SHOWN IN (4 copies unless otherwise specified)	ITEM SEE SECTION G
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24. ADMINISTERED BY (If other than item 7) CODE	25. PAYMENT WILL BE MADE BY CODE
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26. NAME OF CONTRACTING OFFICER (Type or print) CHERYL A. ANDERSON	27. UNITED STATES OF AMERICA  (Signature of Contracting Officer)	28. AWARD DATE 8 Jan 2001
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IMPORTANT — Award will be made on this Form, or on Standard Form 26, or by other authorized official written notice.

AUTHORIZED FOR LOCAL REPRODUCTION
Previous edition is unusable

STANDARD FORM 33 (Rev. 9-97)
Prescribed by GSA — FAR (48 CFR) 53.214(c)

AMENDMENT NO.	DATE	AMENDMENT NO.	DATE
0007	2-23-01	0012	7-23-01
0008	2-26-01	0013	7-31-01
0009	3-5-01	Final Proposal Revision 10-25-01	
0010	3-6-01		
0011	6-1-01		

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RFP NO.: DACW67-01-R-0001
CONTRACT: DACW67-02-D-1002

ALTERATIONS IN CONTRACT
(FAR 52.252-4) (APR 1984)

PORTIONS OF THIS CONTRACT ARE ALTERED AS FOLLOWS:

1. Contracting Officer Representative (COR) will be designated with individual Task Order.
2. Current Wage Determinations are incorporated herein –

Wage Decision No. WA010001, Modification 21 dated 01/04/2002
Wage Decision No. OR010001, Modification 18 dated 01/04/2002
Wage Decision No. ID010001, Modification 15 dated 01/04/2002
Wage Decision No. MT010001, Modification 3 dated 11/16/2001
3. Reference Para. H-1.d; the guaranteed minimum requirement of \$200,000 for the Base Year is hereby satisfied with the award of Task Order 0001 in the amount of \$727,265 by Portland District.


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CONTRACT NUMBER: DACW67-02-D-1002

IF THE CONTRACTOR IS A CORPORATION OR PARTNERSHIP, THE APPLICABLE PORTION OF THE FORM LISTED BELOW MUST BE COMPLETED. IN THE ALTERNATIVE, OTHER EVIDENCE MUST BE SUBMITTED TO SUBSTANTIATE THE AUTHORITY OF THE PERSON SIGNING THE CONTRACT. IF A CORPORATION, THE SAME OFFICER SHALL NOT EXECUTE BOTH THE CONTRACT AND THE CERTIFICATE.

CORPORATE CERTIFICATE

I, Bo Price, certify that I am the Assitant Secretary
Secretary of the Corporation named as Contractor herein; that Vladimir Shulyaker
who signed this contract on behalf of the Contractor was then Dir. HighCurrentSystems of said
corporation; that said contract was duly signed for and on behalf of said corporation by authority of its
governing body and is within the scope of its corporate powers.

 (CORPORATE
(Secretary) SEAL)

AUTHORITY TO BIND PARTNERSHIP

This is to certify that the names, signatures and Social Security Numbers of all partners are listed below and that the person signing the contract has authonty actually to bind the partnership pursuant to its partnership agreements. Each of the partners individually has full authority to enter into and execute contractual instruments on behalf of said partnership with the United States of America, except as follows: (state "none" or describe limitations, if any)

This authority shall remain in full force and effect until such time as the revocation of authority by any cause whatsoever has been furnished in writing to, and acknowledged by, the Contracting Officer.

(Names, Signatures and Social Security Numbers of all Partners)

NAME	SIGNATURE	SOCIAL SECURITY NO.
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

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Main Unit Circuit Breaker Replacement, Various Sites

SECTION B
SUPPLIES OR SERVICES AND PRICES/COSTS

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
BASE PERIOD ITEMS					
0001	The Dalles Units 1 - 8				
0001AA	All Work for Design and Development of SF6 Retrofit Breakers for The Dalles, Units 1-8	1	Job	LS	\$ <u>78,603</u>
0001AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0001AA, for The Dalles, Units 1-8	8	Each	\$ <u>355,744</u>	\$ <u>2,845,952</u>
0001AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0001AB, in place complete	8	Each	\$ <u>70,010</u>	\$ <u>560,080</u>
0001AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0001AB	3	Each	\$ <u>71,049</u>	\$ <u>213,147</u>
0001AE	All Work to Provide One Week of Training for Government Personnel at The Dalles Power House.	1	Each	\$ <u>5,459</u>	\$ <u>5,459</u>
0002	The Dalles Units 9 - 14				
0002AA	All Work for Design and Development of SF6 Retrofit Breakers for The Dalles, Units 9-14	1	Job	LS	\$ <u>58,888</u>
0002AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0002AA, for The Dalles, Units 9-14	6	Each	\$ <u>359,981</u>	\$ <u>2,159,886</u>
0002AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0002AB, in place complete	6	Each	\$ <u>69,935</u>	\$ <u>419,610</u>
0002AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0002AB	3	Each	\$ <u>70,916</u>	\$ <u>212,748</u>
0002AE	All Work to Provide One Week of Training for Government Personnel at The Dalles Power House.	1	Each	\$ <u>5,453</u>	\$ <u>5,453</u>

DACW67-01-R-0001

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Main Unit Circuit Breaker Replacement, Various Sites

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
<u>BASE PERIOD ITEMS - Continued</u>					
0003	The Dalles Units 15 - 22				
0003AA	All Work for Design and Development of SF6 Retrofit Breakers for The Dalles, Units 15-22	1	Job	LS	\$ <u>78,603</u>
0003AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0003AA, for The Dalles, Units 15-22	1	Each	\$ <u>355,744</u>	\$ <u>355,744</u>
0003AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0003AB, in place complete	1	Each	\$ <u>70,010</u>	\$ <u>70,010</u>
0003AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0003AB	1	Each	\$ <u>71,049</u>	\$ <u>71,049</u>
0003AE	All Work to Provide One Week of Training for Government Personnel at The Dalles Power House.	1	Each	\$ <u>5,459</u>	\$ <u>5,459</u>
0004	Bonneville PH-II, Units 11 - 18				
0004AA	All Work for Design and Development of SF6 Retrofit Breakers for Bonneville PH-II, Units 11-18	1	Job	LS	\$ <u>67,797</u>
0004AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0004AA, for Bonneville PH-II, Units 11-18	8	Each	\$ <u>281,485</u>	\$ <u>2,251,880</u>
0004AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0004AB, in place complete	8	Each	\$ <u>70,012</u>	\$ <u>560,096</u>
0004AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0004AB	2	Each	\$ <u>71,081</u>	\$ <u>142,162</u>
0004AE	All Work to Provide One Week of Training for Government Personnel at The Bonneville PH-II Power House.	1	Each	\$ <u>5,459</u>	\$ <u>5,459</u>

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Main Unit Circuit Breaker Replacement, Various Sites

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
<u>BASE PERIOD ITEMS - Continued</u>					
0005	Chief Joseph, Units 17 - 27				
0005AA	All Work for Design and Development of SF6 Retrofit Breakers for Chief Joseph, Units 17-27	1	Job	LS	\$ <u>94,395</u>
0005AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0005AA, for Chief Joseph, Units 17-27	11	Each	\$ <u>353,260</u>	\$ <u>3,885,860</u>
0005AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0005AB, in place complete	11	Each	\$ <u>69,497</u>	\$ <u>764,467</u>
0005AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0005AB	2	Each	\$ <u>70,243</u>	\$ <u>140,486</u>
0005AE	All Work to Provide One Week of Training for Government Personnel at The Chief Joseph Power House.	1	Each	\$ <u>5,419</u>	\$ <u>5,419</u>
0006	Libby, Units 1 - 4				
0006AA	All Work for Design and Development of SF6 Retrofit Breakers for Libby, Units 1- 4	1	Job	LS	\$ <u>55,415</u>
0006AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0006AA, for Libby, Units 1- 4	4	Each	\$ <u>260,991</u>	\$ <u>1,043,964</u>
0006AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0006AB, in place complete	4	Each	\$ <u>70,024</u>	\$ <u>280,096</u>
0006AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0006AB	1	Each	\$ <u>56,794</u>	\$ <u>56,794</u>
0006AE	All Work to Provide One Week of Training for Government Personnel at The Libby Power House.	1	Each	\$ <u>5,460</u>	\$ <u>5,460</u>

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Main Unit Circuit Breaker Replacement. Various Sites

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
<u>BASE PERIOD ITEMS - Continued</u>					
0007	Lower Monumental, Units 1 - 6				
0007AA	All Work for Design and Development of SF6 Retrofit Breakers for Lower Monumental, Units 1- 6	1	Job	LS	\$ <u>109,515</u>
0007AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0007AA, for Lower Monumental, Units 1- 6	6	Each	\$ <u>317,066</u>	\$ <u>1,902,396</u>
0007AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0007AB, in place complete	6	Each	\$ <u>70,014</u>	\$ <u>420,084</u>
0007AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0007AB	1	Each	\$ <u>75,054</u>	\$ <u>75,054</u>
0007AE	All Work to Provide One Week of Training for Government Personnel at The Lower Monumental Power House.	1	Each	\$ <u>5,459</u>	\$ <u>5,459</u>
0008	Little Goose, Units 1 - 6				
0008AA	All Work for Design and Development of SF6 Retrofit Breakers for Little Goose, Units 1- 6	1	Job	LS	\$ <u>109,515</u>
0008AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0008AA, for Little Goose, Units 1- 6	3	Each	\$ <u>317,066</u>	\$ <u>951,198</u>
0008AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0008AB, in place complete	3	Each	\$ <u>70,014</u>	\$ <u>210,042</u>
0008AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0008AB	1	Each	\$ <u>75,054</u>	\$ <u>75,054</u>
0008AE	All Work to Provide One Week of Training for Government Personnel at The Little Goose Power House.	1	Each	\$ <u>5,459</u>	\$ <u>5,459</u>

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Main Unit Circuit Breaker Replacement. Various Sites

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
<u>BASE PERIOD ITEMS - Continued</u>					
0009	Lower Granite, Units 1 - 6				
0009AA	All Work for Design and Development of SF6 Retrofit Breakers for Lower Granite, Units 1-6	1	Job	LS	\$ <u>109,515</u>
0009AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0009AA, for Lower Granite, Units 1-6	3	Each	\$ <u>317,066</u>	\$ <u>951,198</u>
0009AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0009AB, in place complete	3	Each	\$ <u>70,014</u>	\$ <u>210,042</u>
0009AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0009AB	1	Each	\$ <u>75,054</u>	\$ <u>75,054</u>
0009AE	All Work to Provide One Week of Training for Government Personnel at The Lower Granite Power House.	1	Each	\$ <u>5,459</u>	\$ <u>5,459</u>
0010	Dworshak, Units 1 - 2				
0010AA	All Work for Design and Development of SF6 Retrofit Breakers for Dworshak, Units 1-2	1	Job	LS	\$ <u>75,628</u>
0010AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0010AA, for Dworshak, Units 1-2	2	Each	\$ <u>288,113</u>	\$ <u>576,226</u>
0010AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0010AB, in place complete	2	Each	\$ <u>70,103</u>	\$ <u>140,206</u>
0010AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0010AB	1	Each	\$ <u>74,976</u>	\$ <u>74,976</u>
0010AE	All Work to Provide One Week of Training for Government Personnel at The Dworshak Power House.	1	Each	\$ <u>5,466</u>	\$ <u>5,466</u>

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Main Unit Circuit Breaker Replacement, Various Sites

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
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BASE PERIOD ITEMS - Continued

0011 (Deleted)

0012 Dworshak, Tie Breaker

0012AA	All Work for Design and Development of SF6 Retrofit Breakers for Dworshak, Tie Breaker	1	Job	LS	\$ <u>63,213</u>
0012AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0012AA, for Dworshak, Tie Breaker	1	Each	\$ <u>327,228</u>	\$ <u>327,228</u>
0012AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0012AB, in place complete	1	Each	\$ <u>70,393</u>	\$ <u>70,393</u>
0012AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0012AB	1	Each	\$ <u>75,120</u>	\$ <u>75,120</u>

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Main Unit Circuit Breaker Replacement, Various Sites

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
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BASE PERIOD ITEMS - Continued

0013	NON-PREPRICED ITEM ALLOWANCE	1	LS	***	NTE \$750,000
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0014 (Deleted)

TOTAL ALL BASE PERIOD ITEMS 0001AA THROUGH 0013 \$ 23,873,941.00

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Main Unit Circuit Breaker Replacement. Various Sites

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
<u>OPTION PERIOD 1 ITEMS</u>					
0001	The Dalles Units 1 - 8				
0001AA	All Work for Design and Development of SF6 Retrofit Breakers for The Dalles, Units 1-8	1	Job	LS	\$ <u>82,423</u>
0001AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0001AA, for The Dalles, Units 1-8	8	Each	\$ <u>365,279</u>	\$ <u>2,922,232</u>
0001AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0001AB, in place complete	8	Each	\$ <u>72,714</u>	\$ <u>581,712</u>
0001AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0001AB	3	Each	\$ <u>73,488</u>	\$ <u>220,464</u>
0001AE	All Work to Provide One Week of Training for Government Personnel at The Dalles Power House.	1	Each	\$ <u>5,796</u>	\$ <u>5,796</u>
0002	The Dalles Units 9 - 14				
0002AA	All Work for Design and Development of SF6 Retrofit Breakers for The Dalles, Units 9-14	1	Job	LS	\$ <u>61,827</u>
0002AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0002AA, for The Dalles, Units 9-14	6	Each	\$ <u>370,056</u>	\$ <u>2,220,336</u>
0002AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0002AB, in place complete	6	Each	\$ <u>72,727</u>	\$ <u>436,362</u>
0002AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0002AB	3	Each	\$ <u>73,444</u>	\$ <u>220,332</u>
0002AE	All Work to Provide One Week of Training for Government Personnel at The Dalles Power House.	1	Each	\$ <u>5,797</u>	\$ <u>5,797</u>

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Main Unit Circuit Breaker Replacement, Various Sites

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
<u>OPTION PERIOD 1 ITEMS - Continued</u>					
0003	The Dalles Units 15 - 22				
0003AA	All Work for Design and Development of SF6 Retrofit Breakers for The Dalles, Units 15-22	1	Job	LS	\$ <u>82,423</u>
0003AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0003AA, for The Dalles, Units 15-22	1	Each	\$ <u>365,279</u>	\$ <u>365,279</u>
0003AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0003AB, in place complete	1	Each	\$ <u>72,714</u>	\$ <u>72,714</u>
0003AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0003AB	1	Each	\$ <u>73,488</u>	\$ <u>73,488</u>
0003AE	All Work to Provide One Week of Training for Government Personnel at The Dalles Power House.	1	Each	\$ <u>5,796</u>	\$ <u>5,796</u>
0004	Bonneville PH-II, Units 11 - 18				
0004AA	All Work for Design and Development of SF6 Retrofit Breakers for Bonneville PH-II, Units 11-18	1	Job	LS	\$ <u>71,180</u>
0004AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0004AA, for Bonneville PH-II, Units 11-18	8	Each	\$ <u>289,988</u>	\$ <u>2,319,904</u>
0004AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0004AB, in place complete	8	Each	\$ <u>72,805</u>	\$ <u>582,440</u>
0004AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0004AB	2	Each	\$ <u>73,609</u>	\$ <u>147,218</u>
0004AE	All Work to Provide One Week of Training for Government Personnel at The Bonneville PH-II Power House.	1	Each	\$ <u>5,803</u>	\$ <u>5,803</u>

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Main Unit Circuit Breaker Replacement, Various Sites

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
<u>OPTION PERIOD 1 ITEMS - Continued</u>					
0005	Chief Joseph, Units 17 - 27				
0005AA	All Work for Design and Development of SF6 Retrofit Breakers for Chief Joseph, Units 17-27	1	Job	LS	\$ <u>98,975</u>
0005AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0005AA, for Chief Joseph, Units 17-27	11	Each	\$ <u>363,677</u>	\$ <u>4,000,447</u>
0005AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0005AB, in place complete	11	Each	\$ <u>72,177</u>	\$ <u>793,947</u>
0005AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0005AB	2	Each	\$ <u>73,047</u>	\$ <u>146,094</u>
0005AE	All Work to Provide One Week of Training for Government Personnel at The Chief Joseph Power House.	1	Each	\$ <u>5,753</u>	\$ <u>5,753</u>
0006	Libby, Units 1 - 4				
0006AA	All Work for Design and Development of SF6 Retrofit Breakers for Libby, Units 1- 4	1	Job	LS	\$ <u>58,180</u>
0006AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0006AA, for Libby, Units 1- 4	4	Each	\$ <u>268,311</u>	\$ <u>1,073,244</u>
0006AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0006AB, in place complete	4	Each	\$ <u>72,818</u>	\$ <u>291,272</u>
0006AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0006AB	1	Each	\$ <u>58,750</u>	\$ <u>58,750</u>
0006AE	All Work to Provide One Week of Training for Government Personnel at The Libby Power House.	1	Each	\$ <u>5,804</u>	\$ <u>5,804</u>

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Main Unit Circuit Breaker Replacement, Various Sites

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
<u>OPTION PERIOD 1 ITEMS - Continued</u>					
0007	Lower Monumental, Units 1 - 6				
0007AA	All Work for Design and Development of SF6 Retrofit Breakers for Lower Monumental, Units 1- 6	1	Job	LS	\$ <u>114,981</u>
0007AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0007AA, for Lower Monumental, Units 1- 6	6	Each	\$ <u>326,501</u>	\$ <u>1,959,006</u>
0007AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0007AB, in place complete	6	Each	\$ <u>72,808</u>	\$ <u>436,848</u>
0007AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0007AB	1	Each	\$ <u>77,741</u>	\$ <u>77,741</u>
0007AE	All Work to Provide One Week of Training for Government Personnel at The Lower Monumental Power House.	1	Each	\$ <u>5,803</u>	\$ <u>5,803</u>
0008	Little Goose, Units 1 - 6				
0008AA	All Work for Design and Development of SF6 Retrofit Breakers for Little Goose, Units 1- 6	1	Job	LS	\$ <u>114,981</u>
0008AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0008AA, for Little Goose, Units 1- 6	3	Each	\$ <u>326,501</u>	\$ <u>979,503</u>
0008AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0008AB, in place complete	3	Each	\$ <u>72,808</u>	\$ <u>218,424</u>
0008AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0008AB	1	Each	\$ <u>77,741</u>	\$ <u>77,741</u>
0008AE	All Work to Provide One Week of Training for Government Personnel at The Little Goose Power House.	1	Each	\$ <u>5,803</u>	\$ <u>5,803</u>

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Main Unit Circuit Breaker Replacement, Various Sites

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
<u>OPTION PERIOD 1 ITEMS - Continued</u>					
0009	Lower Granite, Units 1 - 6				
0009AA	All Work for Design and Development of SF6 Retrofit Breakers for Lower Granite, Units 1-6	1	Job	LS	\$ <u>114,981</u>
0009AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0009AA, for Lower Granite, Units 1- 6	3	Each	\$ <u>326,501</u>	\$ <u>979,503</u>
0009AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0009AB, in place complete	3	Each	\$ <u>72,808</u>	\$ <u>218,424</u>
0009AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0009AB	1	Each	\$ <u>77,741</u>	\$ <u>77,741</u>
0009AE	All Work to Provide One Week of Training for Government Personnel at The Lower Granite Power House.	1	Each	\$ <u>5,803</u>	\$ <u>5,803</u>
0010	Dworshak, Units 1 - 2				
0010AA	All Work for Design and Development of SF6 Retrofit Breakers for Dworshak, Units 1- 2	1	Job	LS	\$ <u>79,403</u>
0010AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0010AA, for Dworshak, Units 1- 2	2	Each	\$ <u>296,955</u>	\$ <u>593,910</u>
0010AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0010AB, in place complete	2	Each	\$ <u>72,902</u>	\$ <u>145,804</u>
0010AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0010AB	1	Each	\$ <u>77,667</u>	\$ <u>77,667</u>
0010AE	All Work to Provide One Week of Training for Government Personnel at The Dworshak Power House.	1	Each	\$ <u>5,811</u>	\$ <u>5,811</u>

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Main Unit Circuit Breaker Replacement, Various Sites

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
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OPTION PERIOD 1 ITEMS - Continued

0011 (Deleted)

0012 Dworshak, Tie Breaker

0012AA	All Work for Design and Development of SF6 Retrofit Breakers for Dworshak, Tie Breaker	1	Job	LS	\$ <u>66,364</u>
0012AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0012AA, for Dworshak, Tie Breaker	1	Each	\$ <u>336,840</u>	\$ <u>336,840</u>
0012AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0012AB, in place complete	1	Each	\$ <u>73,198</u>	\$ <u>73,198</u>
0012AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0012AB	1	Each	\$ <u>77,816</u>	\$ <u>77,816</u>

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Main Unit Circuit Breaker Replacement, Various Sites

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
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OPTION PERIOD 1 ITEMS - Continued

0013	NON-PREPRICED ITEM ALLOWANCE	1	LS	***	NTE \$750,000
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0014 (Deleted)

TOTAL ALL OPTION PERIOD 1 ITEMS 0001AA THROUGH 0013 \$ **24,610,088.00**

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Main Unit Circuit Breaker Replacement, Various Sites

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
<u>OPTION PERIOD 2 ITEMS</u>					
0001	The Dalles Units 1 - 8				
0001AA	All Work for Design and Development of SF6 Retrofit Breakers for The Dalles, Units 1-8	1	Job	LS	\$ <u>85,713</u>
0001AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0001AA, for The Dalles, Units 1-8	8	Each	\$ <u>377,232</u>	\$ <u>3,017,856</u>
0001AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0001AB, in place complete	8	Each	\$ <u>75,506</u>	\$ <u>604,048</u>
0001AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0001AB	3	Each	\$ <u>75,984</u>	\$ <u>227,952</u>
0001AE	All Work to Provide One Week of Training for Government Personnel at The Dalles Power House.	1	Each	\$ <u>5,878</u>	\$ <u>5,878</u>
0002	The Dalles Units 9 - 14				
0002AA	All Work for Design and Development of SF6 Retrofit Breakers for The Dalles, Units 9-14	1	Job	LS	\$ <u>64,295</u>
0002AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0002AA, for The Dalles, Units 9-14	6	Each	\$ <u>382,152</u>	\$ <u>2,292,912</u>
0002AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0002AB, in place complete	6	Each	\$ <u>75,520</u>	\$ <u>453,120</u>
0002AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0002AB	3	Each	\$ <u>75,940</u>	\$ <u>227,820</u>
0002AE	All Work to Provide One Week of Training for Government Personnel at The Dalles Power House.	1	Each	\$ <u>5,879</u>	\$ <u>5,879</u>

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Main Unit Circuit Breaker Replacement. Various Sites

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
<u>OPTION PERIOD 2 ITEMS - Continued</u>					
0003	The Dalles Units 15 - 22				
0003AA	All Work for Design and Development of SF6 Retrofit Breakers for The Dalles. Units 15-22	1	Job	LS	\$ <u>85,713</u>
0003AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0003AA, for The Dalles, Units 15-22	1	Each	\$ <u>377,232</u>	\$ <u>377,232</u>
0003AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0003AB, in place complete	1	Each	\$ <u>75,506</u>	\$ <u>75,506</u>
0003AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0003AB	1	Each	\$ <u>75,984</u>	\$ <u>75,984</u>
0003AE	All Work to Provide One Week of Training for Government Personnel at The Dalles Power House.	1	Each	\$ <u>5,878</u>	\$ <u>5,878</u>
0004	Bonneville PH-II, Units 11 - 18				
0004AA	All Work for Design and Development of SF6 Retrofit Breakers for Bonneville PH-II, Units 11-18	1	Job	LS	\$ <u>74,020</u>
0004AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0004AA, for Bonneville PH-II, Units 11-18	8	Each	\$ <u>299,680</u>	\$ <u>2,397,440</u>
0004AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0004AB, in place complete	8	Each	\$ <u>75,599</u>	\$ <u>604,792</u>
0004AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0004AB	2	Each	\$ <u>76,105</u>	\$ <u>152,210</u>
0004AE	All Work to Provide One Week of Training for Government Personnel at The Bonneville PH-II Power House.	1	Each	\$ <u>5,885</u>	\$ <u>5,885</u>

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Main Unit Circuit Breaker Replacement, Various Sites

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
<u>OPTION PERIOD 2 ITEMS - Continued</u>					
0005	Chief Joseph, Units 17 - 27				
0005AA	All Work for Design and Development of SF6 Retrofit Breakers for Chief Joseph, Units 17-27	1	Job	LS	\$ <u>102,703</u>
0005AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0005AA, for Chief Joseph, Units 17-27	11	Each	\$ <u>374,770</u>	\$ <u>4,122,470</u>
0005AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0005AB, in place complete	11	Each	\$ <u>74,786</u>	\$ <u>822,646</u>
0005AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0005AB	2	Each	\$ <u>75,361</u>	\$ <u>105,722</u>
0005AE	All Work to Provide One Week of Training for Government Personnel at The Chief Joseph Power House.	1	Each	\$ <u>5,822</u>	\$ <u>5,822</u>
0006	Libby, Units 1 - 4				
0006AA	All Work for Design and Development of SF6 Retrofit Breakers for Libby, Units 1- 4	1	Job	LS	\$ <u>60,500</u>
0006AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0006AA, for Libby, Units 1- 4	4	Each	\$ <u>277,069</u>	\$ <u>1,108,276</u>
0006AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0006AB, in place complete	4	Each	\$ <u>75,612</u>	\$ <u>302,448</u>
0006AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0006AB	1	Each	\$ <u>60,681</u>	\$ <u>60,681</u>
0006AE	All Work to Provide One Week of Training for Government Personnel at The Libby Power House.	1	Each	\$ <u>5,886</u>	\$ <u>5,886</u>

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Main Unit Circuit Breaker Replacement, Various Sites

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
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OPTION PERIOD 2 ITEMS - Continued**0007 Lower Monumental, Units 1 - 6**

0007AA	All Work for Design and Development of SF6 Retrofit Breakers for Lower Monumental, Units 1- 6	1	Job	LS	\$ <u>119,570</u>
0007AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0007AA, for Lower Monumental, Units 1- 6	6	Each	\$ <u>337,378</u>	\$ <u>2,024,268</u>
0007AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0007AB, in place complete	6	Each	\$ <u>75,603</u>	\$ <u>453,618</u>
0007AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0007AB	1	Each	\$ <u>80,394</u>	\$ <u>80,394</u>
0007AE	All Work to Provide One Week of Training for Government Personnel at The Lower Monumental Power House.	1	Each	\$ <u>5,886</u>	\$ <u>5,886</u>

0008 Little Goose, Units 1 - 6

0008AA	All Work for Design and Development of SF6 Retrofit Breakers for Little Goose, Units 1- 6	1	Job	LS	\$ <u>119,570</u>
0008AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0008AA, for Little Goose, Units 1- 6	3	Each	\$ <u>337,378</u>	\$ <u>1,012,134</u>
0008AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0008AB, in place complete	3	Each	\$ <u>75,603</u>	\$ <u>226,809</u>
0008AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0008AB	1	Each	\$ <u>80,394</u>	\$ <u>80,394</u>
0008AE	All Work to Provide One Week of Training for Government Personnel at The Little Goose Power House.	1	Each	\$ <u>5,886</u>	\$ <u>5,886</u>

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Main Unit Circuit Breaker Replacement, Various Sites

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
<u>OPTION PERIOD 2 ITEMS - Continued</u>					
0009	Lower Granite, Units 1 - 6				
0009AA	All Work for Design and Development of SF6 Retrofit Breakers for Lower Granite, Units 1-6	1	Job	LS	\$ <u>119,570</u>
0009AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0009AA, for Lower Granite, Units 1-6	3	Each	\$ <u>337,378</u>	\$ <u>1,012,134</u>
0009AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0009AB, in place complete	3	Each	\$ <u>75,603</u>	\$ <u>226,809</u>
0009AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0009AB	1	Each	\$ <u>80,394</u>	\$ <u>80,394</u>
0009AE	All Work to Provide One Week of Training for Government Personnel at The Lower Granite Power House.	1	Each	\$ <u>5,886</u>	\$ <u>5,886</u>
0010	Dworshak, Units 1 - 2				
0010AA	All Work for Design and Development of SF6 Retrofit Breakers for Dworshak, Units 1-2	1	Job	LS	\$ <u>82,573</u>
0010AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0010AA, for Dworshak, Units 1-2	2	Each	\$ <u>306,895</u>	\$ <u>613,790</u>
0010AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0010AB, in place complete	2	Each	\$ <u>75,701</u>	\$ <u>151,402</u>
0010AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0010AB	1	Each	\$ <u>80,323</u>	\$ <u>80,323</u>
0010AE	All Work to Provide One Week of Training for Government Personnel at The Dworshak Power House.	1	Each	\$ <u>5,893</u>	\$ <u>5,893</u>

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Main Unit Circuit Breaker Replacement, Various Sites

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
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OPTION PERIOD 2 ITEMS - Continued

0011 (Deleted)

0012 Dworshak, Tie Breaker

0012AA	All Work for Design and Development of SF6 Retrofit Breakers for Dworshak, Tie Breaker	1	Job	LS	\$ <u>69,008</u>
0012AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0012AA, for Dworshak, Tie Breaker	1	Each	\$ <u>347,943</u>	\$ <u>347,943</u>
0012AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0012AB, in place complete	1	Each	\$ <u>76,003</u>	\$ <u>76,003</u>
0012AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0012AB	1	Each	\$ <u>80,478</u>	\$ <u>80,478</u>

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Main Unit Circuit Breaker Replacement, Various Sites

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
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OPTION PERIOD 2 ITEMS - Continued

0013	NON-PREPRICED ITEM ALLOWANCE	1	LS	***	NTE \$750,000
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0014 (Deleted)

TOTAL ALL OPTION PERIOD 2 ITEMS 0001AA THROUGH 0013 **\$ 25,413,022.00**

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Main Unit Circuit Breaker Replacement, Various Sites

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
<u>OPTION PERIOD 3 ITEMS</u>					
0001	The Dalles Units 1 - 8				
0001AA	All Work for Design and Development of SF6 Retrofit Breakers for The Dalles, Units 1-8	1	Job	LS	\$ <u>88,205</u>
0001AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0001AA, for The Dalles, Units 1-8	8	Each	\$ <u>390,990</u>	\$ <u>3,127,920</u>
0001AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0001AB, in place complete	8	Each	\$ <u>78,232</u>	\$ <u>625,856</u>
0001AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0001AB	3	Each	\$ <u>79,693</u>	\$ <u>239,079</u>
0001AE	All Work to Provide One Week of Training for Government Personnel at The Dalles Power House.	1	Each	\$ <u>5,960</u>	\$ <u>5,960</u>
0002	The Dalles Units 9 - 14				
0002AA	All Work for Design and Development of SF6 Retrofit Breakers for The Dalles, Units 9-14	1	Job	LS	\$ <u>66,220</u>
0002AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0002AA, for The Dalles, Units 9-14	6	Each	\$ <u>396,424</u>	\$ <u>2,378,544</u>
0002AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0002AB, in place complete	6	Each	\$ <u>78,311</u>	\$ <u>469,866</u>
0002AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0002AB	3	Each	\$ <u>79,714</u>	\$ <u>239,142</u>
0002AE	All Work to Provide One Week of Training for Government Personnel at The Dalles Power House.	1	Each	\$ <u>5,966</u>	\$ <u>5,966</u>

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Main Unit Circuit Breaker Replacement, Various Sites

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
<u>OPTION PERIOD 3 ITEMS - Continued</u>					
0003	The Dalles Units 15 - 22				
0003AA	All Work for Design and Development of SF6 Retrofit Breakers for The Dalles, Units 15-22	1	Job	LS	\$ <u>88,205</u>
0003AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0003AA, for The Dalles, Units 15-22	1	Each	\$ <u>390,990</u>	\$ <u>390,990</u>
0003AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0003AB, in place complete	1	Each	\$ <u>78,232</u>	\$ <u>78,232</u>
0003AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0003AB	1	Each	\$ <u>79,693</u>	\$ <u>79,693</u>
0003AE	All Work to Provide One Week of Training for Government Personnel at The Dalles Power House.	1	Each	\$ <u>5,960</u>	\$ <u>5,960</u>
0004	Bonneville PH-II, Units 11 - 18				
0004AA	All Work for Design and Development of SF6 Retrofit Breakers for Bonneville PH-II, Units 11-18	1	Job	LS	\$ <u>76,234</u>
0004AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0004AA, for Bonneville PH-II, Units 11-18	8	Each	\$ <u>310,652</u>	\$ <u>2,485,216</u>
0004AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0004AB, in place complete	8	Each	\$ <u>78,392</u>	\$ <u>627,136</u>
0004AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0004AB	2	Each	\$ <u>79,883</u>	\$ <u>159,766</u>
0004AE	All Work to Provide One Week of Training for Government Personnel at The Bonneville PH-II Power House.	1	Each	\$ <u>5,972</u>	\$ <u>5,972</u>

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Main Unit Circuit Breaker Replacement, Various Sites

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
<u>OPTION PERIOD 3 ITEMS - Continued</u>					
0005	Chief Joseph, Units 17 - 27				
0005AA	All Work for Design and Development of SF6 Retrofit Breakers for Chief Joseph, Units 17-27	1	Job	LS	\$ <u>105,669</u>
0005AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0005AA, for Chief Joseph, Units 17-27	11	Each	\$ <u>388,373</u>	\$ <u>4,272,103</u>
0005AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0005AB, in place complete	11	Each	\$ <u>77,471</u>	\$ <u>852,181</u>
0005AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0005AB	2	Each	\$ <u>79,022</u>	\$ <u>158,044</u>
0005AE	All Work to Provide One Week of Training for Government Personnel at The Chief Joseph Power House.	1	Each	\$ <u>5,902</u>	\$ <u>5,902</u>
0006	Libby, Units 1 - 4				
0006AA	All Work for Design and Development of SF6 Retrofit Breakers for Libby, Units 1- 4	1	Job	LS	\$ <u>62,310</u>
0006AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0006AA, for Libby, Units 1- 4	4	Each	\$ <u>287,348</u>	\$ <u>1,149,392</u>
0006AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0006AB, in place complete	4	Each	\$ <u>78,405</u>	\$ <u>313,620</u>
0006AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0006AB	1	Each	\$ <u>63,608</u>	\$ <u>63,608</u>
0006AE	All Work to Provide One Week of Training for Government Personnel at The Libby Power House.	1	Each	\$ <u>5,973</u>	\$ <u>5,973</u>

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Main Unit Circuit Breaker Replacement, Various Sites

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
<u>OPTION PERIOD 3 ITEMS - Continued</u>					
0007	Lower Monumental, Units 1 - 6				
0007AA	All Work for Design and Development of SF6 Retrofit Breakers for Lower Monumental, Units 1- 6	1	Job	LS	\$ <u>123,147</u>
0007AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0007AA, for Lower Monumental, Units 1- 6	6	Each	\$ <u>349,810</u>	\$ <u>2,098,860</u>
0007AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0007AB, in place complete	6	Each	\$ <u>78,396</u>	\$ <u>470,376</u>
0007AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0007AB	1	Each	\$ <u>84,407</u>	\$ <u>84,407</u>
0007AE	All Work to Provide One Week of Training for Government Personnel at The Lower Monumental Power House.	1	Each	\$ <u>5,972</u>	\$ <u>5,972</u>
0008	Little Goose, Units 1 - 6				
0008AA	All Work for Design and Development of SF6 Retrofit Breakers for Little Goose, Units 1- 6	1	Job	LS	\$ <u>123,147</u>
0008AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0008AA, for Little Goose, Units 1- 6	3	Each	\$ <u>349,810</u>	\$ <u>1,049,430</u>
0008AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0008AB, in place complete	3	Each	\$ <u>78,396</u>	\$ <u>235,188</u>
0008AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0008AB	1	Each	\$ <u>84,407</u>	\$ <u>84,407</u>
0008AE	All Work to Provide One Week of Training for Government Personnel at The Little Goose Power House.	1	Each	\$ <u>5,972</u>	\$ <u>5,972</u>

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Main Unit Circuit Breaker Replacement, Various Sites

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
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OPTION PERIOD 3 ITEMS - Continued**0009 Lower Granite, Units 1 - 6**

0009AA	All Work for Design and Development of SF6 Retrofit Breakers for Lower Granite, Units 1- 6	1	Job	LS	\$ <u>123,147</u>
0009AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0009AA, for Lower Granite, Units 1- 6	3	Each	\$ <u>349,810</u>	\$ <u>1,049,430</u>
0009AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0009AB, in place complete	3	Each	\$ <u>78,396</u>	\$ <u>235,188</u>
0009AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0009AB	1	Each	\$ <u>84,407</u>	\$ <u>84,407</u>
0009AE	All Work to Provide One Week of Training for Government Personnel at The Lower Granite Power House.	1	Each	\$ <u>5,972</u>	\$ <u>5,972</u>

0010 Dworshak, Units 1 - 2

0010AA	All Work for Design and Development of SF6 Retrofit Breakers for Dworshak, Units 1- 2	1	Job	LS	\$ <u>84,938</u>
0010AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0010AA, for Dworshak, Units 1- 2	2	Each	\$ <u>317,618</u>	\$ <u>635,236</u>
0010AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0010AB, in place complete	2	Each	\$ <u>78,401</u>	\$ <u>156,802</u>
0010AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0010AB	1	Each	\$ <u>84,231</u>	\$ <u>84,231</u>
0010AE	All Work to Provide One Week of Training for Government Personnel at The Dworshak Power House.	1	Each	\$ <u>5,972</u>	\$ <u>5,972</u>

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Main Unit Circuit Breaker Replacement, Various Sites

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
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OPTION PERIOD 3 ITEMS - Continued**0011 (Deleted)****0012 Dworshak, Tie Breaker**

0012AA	All Work for Design and Development of SF6 Retrofit Breakers for Dworshak, Tie Breaker	1	Job	LS	\$ <u>71,066</u>
0012AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0012AA, for Dworshak, Tie Breaker	1	Each	\$ <u>360,645</u>	\$ <u>360,645</u>
0012AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0012AB, in place complete	1	Each	\$ <u>78,805</u>	\$ <u>78,805</u>
0012AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0012AB	1	Each	\$ <u>84,496</u>	\$ <u>84,496</u>

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Main Unit Circuit Breaker Replacement. Various Sites

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
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OPTION PERIOD 3 ITEMS - Continued

0013	NON-PREPRICED ITEM ALLOWANCE	1	LS	***	NTE \$750,000
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0014 (Deleted)

TOTAL ALL OPTION PERIOD 3 ITEMS 0001AA THROUGH 0013 **\$26,324,205.00**

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Main Unit Circuit Breaker Replacement, Various Sites

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
<u>OPTION PERIOD 4 ITEMS</u>					
0001	The Dalles Units 1 - 8				
0001AA	All Work for Design and Development of SF6 Retrofit Breakers for The Dalles, Units 1-8	1	Job	LS	\$ <u>89,848</u>
0001AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0001AA, for The Dalles, Units 1-8	8	Each	\$ <u>404,847</u>	\$ <u>3,238,776</u>
0001AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0001AB, in place complete	8	Each	\$ <u>80,916</u>	\$ <u>647,328</u>
0001AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0001AB	3	Each	\$ <u>83,419</u>	\$ <u>250,257</u>
0001AE	All Work to Provide One Week of Training for Government Personnel at The Dalles Power House.	1	Each	\$ <u>6,040</u>	\$ <u>6,040</u>
0002	The Dalles Units 9 - 14				
0002AA	All Work for Design and Development of SF6 Retrofit Breakers for The Dalles, Units 9-14	1	Job	LS	\$ <u>67,540</u>
0002AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0002AA, for The Dalles, Units 9-14	6	Each	\$ <u>411,018</u>	\$ <u>2,466,108</u>
0002AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0002AB, in place complete	6	Each	\$ <u>81,104</u>	\$ <u>486,624</u>
0002AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0002AB	3	Each	\$ <u>83,550</u>	\$ <u>250,650</u>
0002AE	All Work to Provide One Week of Training for Government Personnel at The Dalles Power House.	1	Each	\$ <u>6,054</u>	\$ <u>6,054</u>

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Main Unit Circuit Breaker Replacement, Various Sites

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
<u>OPTION PERIOD 4 ITEMS - Continued</u>					
0003	The Dalles Units 15 - 22				
0003AA	All Work for Design and Development of SF6 Retrofit Breakers for The Dalles, Units 15-22	1	Job	LS	\$ <u>89,848</u>
0003AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0003AA, for The Dalles, Units 15-22	1	Each	\$ <u>404,847</u>	\$ <u>404,847</u>
0003AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0003AB, in place complete	1	Each	\$ <u>80,916</u>	\$ <u>80,916</u>
0003AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0003AB	1	Each	\$ <u>83,419</u>	\$ <u>83,419</u>
0003AE	All Work to Provide One Week of Training for Government Personnel at The Dalles Power House.	1	Each	\$ <u>6,040</u>	\$ <u>6,040</u>
0004	Bonneville PH-II, Units 11 - 18				
0004AA	All Work for Design and Development of SF6 Retrofit Breakers for Bonneville PH-II, Units 11-18	1	Job	LS	\$ <u>77,752</u>
0004AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0004AA, for Bonneville PH-II, Units 11-18	8	Each	\$ <u>321,814</u>	\$ <u>2,574,512</u>
0004AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0004AB, in place complete	8	Each	\$ <u>81,186</u>	\$ <u>649,488</u>
0004AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0004AB	2	Each	\$ <u>83,724</u>	\$ <u>167,448</u>
0004AE	All Work to Provide One Week of Training for Government Personnel at The Bonneville PH-II Power House.	1	Each	\$ <u>6,060</u>	\$ <u>6,060</u>

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Main Unit Circuit Breaker Replacement, Various Sites

Item No.	Description of Item	Quantity	Unit	Unit Price	Amount
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OPTION PERIOD 4 ITEMS - Continued**0005 Chief Joseph, Units 17 - 27**

0005AA	All Work for Design and Development of SF6 Retrofit Breakers for Chief Joseph, Units 17-27	1	Job	LS	\$ <u>107,671</u>
0005AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0005AA, for Chief Joseph, Units 17-27	11	Each	\$ <u>402,284</u>	\$ <u>4,425,124</u>
0005AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0005AB, in place complete	11	Each	\$ <u>80,155</u>	\$ <u>881,705</u>
0005AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0005AB	2	Each	\$ <u>82,742</u>	\$ <u>165,484</u>
0005AE	All Work to Provide One Week of Training for Government Personnel at The Chief Joseph Power House.	1	Each	\$ <u>5,984</u>	\$ <u>5,984</u>

0006 Libby, Units 1 - 4

0006AA	All Work for Design and Development of SF6 Retrofit Breakers for Libby, Units 1- 4	1	Job	LS	\$ <u>63,551</u>
0006AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0006AA, for Libby, Units 1- 4	4	Each	\$ <u>297,857</u>	\$ <u>1,191,428</u>
0006AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0006AB, in place complete	4	Each	\$ <u>81,199</u>	\$ <u>324,796</u>
0006AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0006AB	1	Each	\$ <u>66,584</u>	\$ <u>66,584</u>
0006AE	All Work to Provide One Week of Training for Government Personnel at The Libby Power House.	1	Each	\$ <u>5,458</u>	\$ <u>5,458</u>

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Main Unit Circuit Breaker Replacement, Various Sites

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
<u>OPTION PERIOD 4 ITEMS - Continued</u>					
0007	Lower Monumental, Units 1 - 6				
0007AA	All Work for Design and Development of SF6 Retrofit Breakers for Lower Monumental, Units 1- 6	1	Job	LS	\$ <u>125,444</u>
0007AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0007AA, for Lower Monumental, Units 1- 6	6	Each	\$ <u>362,017</u>	\$ <u>2,172,102</u>
0007AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0007AB, in place complete	6	Each	\$ <u>81,089</u>	\$ <u>486,534</u>
0007AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0007AB	1	Each	\$ <u>88,375</u>	\$ <u>88,375</u>
0007AE	All Work to Provide One Week of Training for Government Personnel at The Lower Monumental Power House.	1	Each	\$ <u>6,053</u>	\$ <u>6,053</u>
0008	Little Goose, Units 1 - 6				
0008AA	All Work for Design and Development of SF6 Retrofit Breakers for Little Goose, Units 1- 6	1	Job	LS	\$ <u>125,444</u>
0008AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0008AA, for Little Goose, Units 1- 6	3	Each	\$ <u>362,017</u>	\$ <u>1,086,051</u>
0008AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0008AB, in place complete	3	Each	\$ <u>81,089</u>	\$ <u>243,267</u>
0008AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0008AB	1	Each	\$ <u>88,375</u>	\$ <u>88,375</u>
0008AE	All Work to Provide One Week of Training for Government Personnel at The Little Goose Power House.	1	Each	\$ <u>6,053</u>	\$ <u>6,053</u>

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Main Unit Circuit Breaker Replacement, Various Sites

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
<u>OPTION PERIOD 4 ITEMS - Continued</u>					
0009	Lower Granite, Units 1 - 6				
0009AA	All Work for Design and Development of SF6 Retrofit Breakers for Lower Granite, Units 1-6	1	Job	LS	\$ <u>125,444</u>
0009AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0009AA, for Lower Granite, Units 1- 6	3	Each	\$ <u>362,017</u>	\$ <u>1,086,051</u>
0009AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0009AB, in place complete	3	Each	\$ <u>81,089</u>	\$ <u>243,267</u>
0009AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0009AB	1	Each	\$ <u>88,375</u>	\$ <u>88,375</u>
0009AE	All Work to Provide One Week of Training for Government Personnel at The Lower Granite Power House.	1	Each	\$ <u>6,053</u>	\$ <u>6,053</u>
0010	Dworshak, Units 1 - 2				
0010AA	All Work for Design and Development of SF6 Retrofit Breakers for Dworshak, Units 1- 2	1	Job	LS	\$ <u>86,629</u>
0010AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0010AA, for Dworshak, Units 1- 2	2	Each	\$ <u>328,897</u>	\$ <u>657,794</u>
0010AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0010AB, in place complete	2	Each	\$ <u>81,195</u>	\$ <u>162,390</u>
0010AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0010AB	1	Each	\$ <u>88,305</u>	\$ <u>88,305</u>
0010AE	All Work to Provide One Week of Training for Government Personnel at The Dworshak Power House.	1	Each	\$ <u>6,061</u>	\$ <u>6,061</u>

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Main Unit Circuit Breaker Replacement, Various Sites

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
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OPTION PERIOD 4 ITEMS - Continued

0011 (Deleted)

0012 Dworshak, Tie Breaker

0012AA	All Work for Design and Development of SF6 Retrofit Breakers for Dworshak, Tie Breaker	1	Job	LS	\$ <u>72,476</u>
0012AB	All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Developed in Item 0012AA, for Dworshak, Tie Breaker	1	Each	\$ <u>373,585</u>	\$ <u>373,585</u>
0012AC	All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item 0012AB, in place complete	1	Each	\$ <u>81,607</u>	\$ <u>81,607</u>
0012AD	All Work to Fabricate and Deliver a set of spare parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item 0012AB	1	Each	\$ <u>88,579</u>	\$ <u>88,579</u>

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Main Unit Circuit Breaker Replacement. Various Sites

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
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OPTION PERIOD 4 ITEMS - Continued

0013	NON-PREPRICED ITEM ALLOWANCE	1	LS	***	NTE \$750,000
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0014 (Deleted)

TOTAL ALL OPTION PERIOD 4 ITEMS 0001AA THROUGH 0013 \$ 27,231,654.00

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Main Unit Circuit Breaker Replacement, Various SitesNotes:

1. Contractor to assume that Main Unit Breaker cabinet and structural coatings will be lead-based material. Abatement of the lead-based coating material will not be required unless the installation of the retrofit breaker assembly requires making modifications to the cabinets or structural systems which will disturb the coating. Costs of sampling and analysis for lead-based coating material and abatement of lead-based coatings in areas to be disturbed shall be considered incidental to the work and shall be included in the Contractor's price proposal under Schedule Items ****AC, All Work for Installation of a SF6 Retrofit Breaker Assembly.
2. Asbestos abatement will be negotiated on the individual task orders on an as required basis. Costs of the initial survey of the work area for the presence of asbestos containing materials, and the sampling and testing of up to 2 bulk samples, shall be considered incidental to the work and shall be included in the Contractor's price proposal under Schedule Items ****AC, All Work for Installation of a SF6 Retrofit Breaker Assembly. See Specification Section 13280 Asbestos Abatement - paragraph 1.3.
3. Each "Period" of service is defined under Section F, DELIVERIES OR PERFORMANCE, paragraph F-1 Period Of Service and is not to exceed one year.
4. "NTE" shown associated with any line item under the column heading for "Amount" means "not to exceed."

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SECTION B (CON'T)
SUPPLIES OR SERVICES AND PRICES/COSTS
RECAPITULATION

<u>Description</u>	<u>Amount</u>
TOTAL BASE PERIOD ITEMS	\$ <u>23,873,941.00</u>
TOTAL OPTION PERIOD 1 ITEMS	\$ <u>24,610,088.00</u>
TOTAL OPTION PERIOD 2 ITEMS	\$ <u>25,413,022.00</u>
TOTAL OPTION PERIOD 3 ITEMS	\$ <u>26,324,205.00</u>
TOTAL OPTION PERIOD 4 ITEMS	\$ <u>27,231,654.00</u>
TOTAL BASE PERIOD ITEMS AND ALL OPTION PERIOD ITEMS (Total of up to 5 Years)	\$ <u>127,452,910.00</u>

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**SMALL, SMALL DISADVANTAGED AND WOMEN-OWNED
SMALL BUSINESS SUBCONTRACTING PLAN**

February 22, 2001
Revised December 21, 2001
Revised January 3, 2002

**ABB Power T&D Company, Inc.
1460 Livingston Avenue
North Brunswick, NJ 08902-8005**

**Main Unit Circuit Breaker Replacement
Various sites, Washington, Oregon, and Idaho
Solicitation No. DACW67-01-R-0001**

1. In accordance with the contract clauses at 52.219-8 and 52.219-9, ABB Power T&D Company, Inc. submits the following Subcontracting Plan for Small, Small Disadvantaged, and Women-owned Business Concerns.
2. Corresponding dollar values for percentages cited in paragraph 3 for the base period only:
 - A. Total contract amount is Not to Exceed \$ 10,000,000.00.
 - B. Total dollars planned to be subcontracted: \$ 2,324,500.00.
 - C. Total dollars planned to be subcontracted to small business concerns: \$ 1,964,202.00.
 - D. Total dollars planned to be subcontracted to HUBZone small business: \$ 58,113.00.
 - E. Total dollars planned to be subcontracted to small disadvantaged business concerns: \$ 116,225.00.
 - F. Total dollars planned to be subcontracted to small women-owned business concerns: \$ 116,225.00.
 - G. Total dollars planned to be subcontracted to veteran-owned small business concerns \$ 69,735.00.
Included in this amount are subcontracting opportunities for service- disabled veteran-owned small business concerns.
3. The following percentage goals are applicable to the contract awarded under solicitation cited above.
 - A. The total estimated percentage of all planned subcontracting to all types of business concerns under this contract is: 23.5 %.
 - B. Small Business Concerns: 84.5 % of total planned subcontracting dollars under this contract will go to subcontractors who are small business concerns including 3c and 3d.
 - C. Small HUBZone Business Concerns: 2.5 % of total planned subcontracting dollars under this contract will go to subcontractors who are HUBZone small business contractors.
 - D. Small Disadvantaged Business Concerns: 5 % of total planned subcontracting dollars under this contract will go to subcontractors who are small disadvantaged individuals.
 - E. Small Woman-Owned Business Concerns: 5 % of total planned subcontracting dollars under this contract will go to subcontractors who are small woman-owned businesses.
 - F. Veteran-owned small business concerns: 3 % of total planned subcontracting dollars under this contract will go to subcontractors who are veteran-owned small business and/or service-disabled veteran-owned small business concerns.
4. The principal items or areas we will subcontract under this contract are:
 - A. Of the items or areas stated in 4; the following are planned to be subcontracted to Small Businesses: Phoenix Electric Corp.- Retrofits and Controls
 - B. Of the items or areas stated in 4A; the following are planned to be subcontracted to HUBZone small business concerns: Shipping crates

- C. Of the items or areas stated in 4A; the following are planned to be subcontracted to small Disadvantaged Business concerns: Silk Road Transport- Trucking, Alden Products Company- Buswork fabrication and machining
- D. Of the items or areas stated in 4A; the following are planned to be subcontracted to Small Women-owned Business concerns: M.G. Maher- Customs and Broker
- E. Of the items or areas stated in 4A; the following are planned to be subcontracted to Veteran-owned Small Business and/or service-disabled veteran-owned small business concerns: Hardware

5. Provide a description of the method your firm used to develop the subcontracting goals in paragraph three:

The methods used to develop these subcontracting goals are dictated by the structure of our business, which labored to establish reliable, cost effective and quality-minded sources of supply. We are bound to our Swiss factory as the source of generator circuit breakers; however, we have committed to sourcing all the other subcontracts to U.S. Small, HUBZone, Small Disadvantaged, Women-Owned and Veteran-Owned Small Businesses.

Due to the manufacturing nature of our business there are no known opportunities to subcontract work to Hist. Black Colleges and Universities/Minority interest.

The methods used to identify potential sources for purpose is the company's source lists as follows:

Vendor Information Services
National Minority Purchasing Council
Local Small Business Administration Unit
SBA "Pro- Net"
DOE Directory of Women-Owned Businesses
Try Us- National Minority Business Directory

6. Indirect cost were () were not (X) used in establishing subcontracting goals.

7. The following individual will administer ABB Power T&D Company, Inc. Subcontracting Program:

Name: Gustave Frezel Job Title: HCS Project Groups Manager
Address: 1460 Livingston Avenue, North Brunswick, NJ, 08902-8005
Telephone: (732) 932-6230

This individual's specific duties with regard to the conduct of our firm's Subcontracting Plan will include, but will not be limited to, the following:

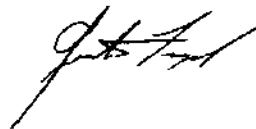
- A. Developing and maintaining bidders lists of small business, HUBZone small business, small disadvantaged business and women-owned small business concerns using sources such as the Small Business Administration's ProNet (<http://pro-net.sba.gov/>) Washington State Office of Minority and Women-owned Business Enterprises (<http://www.wsdot.wa.gov/omwbe/>) Minority Business Development Agency, US Department of Commerce, Local Minority Business Development Centers, Economic Development Centers, and National Center for American Indian Enterprise Development. Obtaining small, small disadvantage and women-owned business sources as listed in paragraph five.
- B. Assuring the inclusion of small business, HUBZone small business, small disadvantaged business and women-owned small business, and veteran-owned small business concerns in all solicitations for products or services which they are capable of providing; and ensuring that all solicitations are structured to permit the maximum possible participation by small, small disadvantaged and women-owned small business concerns.
- C. Establishing and maintaining records of all solicitations and subcontract awards to ensure that the members of the firm who review bidders proposals documents their reasons for selecting a bid

submitted by a small business, HUBZone small business, small disadvantaged business, women-owned small business or veteran-owned small business concern, and monitoring the firm's progress towards achievement of its percentage goals.

- D. Preparing and submitting the subcontracting Report for Individual contracts (SF 294) and the Summary Subcontract Report (SF 295) in accordance with instructions provided, and coordinating and preparing for all compliance reviews by Federal agencies.
 - E. Attendance at DOD sponsored training programs in order to develop guidance and training to firm personnel on the policy of the federal government to aid, assist, and counsel small business under this and other government contracts.
 - F. Conducting or arranging for all other activities necessary to further the intent and attainment of the goals in the Plan to include motivational training of the firm's purchasing personnel, attendance at workshops, seminars and trade fairs conducted by or on behalf of small business, HUBZone small business, and/or small disadvantaged and/or women-owned small business and/or Veteran-owned small business concerns; and general cooperation with members of the small, small disadvantaged, small women-owned, and veteran owned small business concerns or their representatives.
8. The contractor will take the following steps to ensure that small business, small HUBZone business, small disadvantaged business, women-owned and veteran-owned business concerns receive notice of and have an equitable opportunity to opportunity to compete for intended awards of subcontracts and/or purchase orders for the products and/or services describe in paragraph 4 above:
- A. Sources will be requested through SBA's Pro-Net system, business development organizations, minority and small business trade associations and at small, minority, veteran small business and women-owned small business procurement conferences; sources will be contacted; and bidding materials will be provided to all responding parties expressing an interest.
 - B. Internally, motivational training will be conducted to guide and encourage purchasing personnel; source lists and guides to small business, HUBZone small business, small disadvantaged, women-owned small business, and veteran-owned small business concerns will be maintained and utilized by purchasing personnel while soliciting subcontracts and purchase orders; activities will be monitored to ensure sufficient time is allowed for interested bidders to prepare their proposals and to evaluate continuing compliance with the Subcontracting Plan.
9. ABB Power T&D Company, Inc. agrees that the clause entitled "Utilization of Small Business Concerns" (OCT 2000) will be included in all subcontracts that offer further subcontracting opportunities. All subcontractors, except SB concerns, who receive subcontracts in excess of \$500,000 will be required to adopt a plan similar to this one. Such plans will be reviewed to assure that all minimum requirements of an acceptable subcontracting plan have been satisfied.
- The acceptability of percentage goals shall be determined on a case-by-case basis depending on the supplies/services involved, the availability of potential small business, HUBZone small business, small disadvantaged, women-owned and veteran-owned subcontractors, and prior experience. Once approved and implemented, plans will be monitored through the submission of periodic reports and, as time and availability of funds permit, periodic visits to subcontractors facilities to review applicable records and subcontracting program progress.
10. ABB Power T & D Company, Inc. agrees to submit such periodic reports and cooperate in any studies or surveys as may be required by the Contracting agency or Small Business Administration in order to determine the extent of compliance by the offer or with the subcontracting plan and with the clause entitled "Utilization of Small Business Concerns" contained in the contract.
11. ABB Power T & D Company, Inc. agrees to maintain at least the following types of records to document compliance with the subcontracting Plan:

- A. The names of all organizations, agencies and associations contacted for small business, HUBZone small business, small disadvantaged, women-owned small business sources, and veteran-owned small business along with records of attendance at conferences, seminars and trade fair where additional sources were developed.
 - B. Sourced lists, guides, and other data identifying small business, HUBZone small business, small disadvantaged, women-owned and veteran-owned small business subcontractors and vendors.
 - C. Records on all subcontract solicitations resulting in an award of more than \$100,000 on a contract-by-contract basis, indicating
 - (i) Whether small business concerns were solicited, and if why not
 - (ii) Whether HUBZone small business were solicited, and if not, why not
 - (iii) Whether small disadvantaged business concerns were solicited, and if not, why not
 - (iv) Whether small women-owned business concerns were solicited, and if not, why not
 - (v) Whether veteran-owned small business concerns were solicited, and if not, why not
 - (vi) Reasons for the failure of solicited small, small disadvantaged, small women-owned and veteran-owned small business concerns to receive a subcontract award
 - D. Records of all subcontracts award data to include subcontractor's name and address, to be kept on a contract-by-contract basis.
 - E. Minutes of internal motivational and training meetings held for the guidance and encouragement of purchasing personnel, and records of all monitoring activities performed for compliance evaluation.
 - F. Copies of SF 294 and SF 295 showing date and place of filing and copies of all other reports or results of reviews conducted by the contracting agency or other interested agencies of the Federal government to monitor our compliance with the Subcontracting Plan.
12. ABB Power T & D Company, Inc. will submit a SF 295, Summary Subcontract Report, on Corps of Engineers project only. The SF 295 shall be completed and distributed in accordance with the Corps of Engineers Supplemental Instructions. ABB Power T & D Company, Inc. will not report Corps of Engineers projects through any other Agency unless authorized by the Contracting Officer.
13. In closing, ABB Power T & D Company, Inc. states that it will by the policy of ABB Power T & D Company to afford every practicable opportunity for small business, HUBZone small business, small disadvantaged business, small women-owned and veteran-owned small business concerns to participate in contracts awarded to ABB Power T & D Company by the Federal Government, to ensure that equitable opportunity is provided to small business, HUBZone small business, small disadvantaged business, small women-owned and veteran-owned small business concerns to compete for award of subcontracts and purchase orders, and to diligently pursue the achievement of our goals of participation by small business, HUBZone small business, small disadvantaged business, small women-owned and veteran-owned small business in the dollars available for subcontract/purchase order awards under this contract.

Submitted By:



Gustave Frezel
HCS Project Group Manager
ABB Power T & D Company, Inc.
High Voltage Systems Division

Date: February 23, 2001
Revised: December 21, 2001
Revised: January 3, 2002

Option Periods

		<u>Dollars</u>	<u>Percentage</u>
1. Optional Yr <u> OY-1 </u> total:	NTE:	<u>\$10,000,000.00</u>	<u>100 %</u>
2. Total to be subcontracted to all types of businesses:		<u>\$2,324,500.00</u>	<u>23.5 %</u>
A. Subcontracted to Small Business:		<u>\$1,964,202.00</u>	<u>84.5 %</u>
B. Subcontracted to HUBZone Small Businesses:		<u>\$ 58,113.00</u>	<u>2.5%</u>
C. Subcontracted to Small Disadvantaged Businesses:		<u>\$116,225.00</u>	<u>5 %</u>
D. Subcontracted to Women-Owned Small Businesses:		<u>\$116,225.00</u>	<u>5 %</u>
E. Subcontracted to Veteran-owned Small Businesses:		<u>\$ 69,735.00</u>	<u>3%</u>
1. Optional Yr <u> OY-2 </u> total:	NTE:	<u>\$10,000,000.00</u>	<u>100 %</u>
2. Total to be subcontracted to all types of businesses:		<u>\$2,324,500.00</u>	<u>23.5 %</u>
A. Subcontracted to Small Business:		<u>\$1,964,202.00</u>	<u>84.5 %</u>
B. Subcontracted to HUBZone Small Businesses:		<u>\$ 58,113.00</u>	<u>2.5%</u>
C. Subcontracted to Small Disadvantaged Businesses:		<u>\$116,225.00</u>	<u>5 %</u>
D. Subcontracted to Women-Owned Small Businesses:		<u>\$116,225.00</u>	<u>5 %</u>
E. Subcontracted to Veteran-owned Small Businesses:		<u>\$ 69,735.00</u>	<u>3%</u>

1. Optional Yr. <u>OY-3</u> total:	NTE: <u>\$10,000,000.00</u>	<u>100 %</u>
2. Total to be subcontracted to all types of businesses:	<u>\$2,324,500.00</u>	<u>23.5 %</u>
A. Subcontracted to Small Business:	<u>\$1,964,202.00</u>	<u>84.5 %</u>
B. Subcontracted to HUBZone Small Businesses:	<u>\$ 58,113.00</u>	<u>2.5%</u>
C. Subcontracted to Small Disadvantaged Businesses:	<u>\$116,225.00</u>	<u>5 %</u>
D. Subcontracted to Women-Owned Small Businesses:	<u>\$116,225.00</u>	<u>5 %</u>
E. Subcontracted to Veteran-owned Small Businesses:	<u>\$ 69,735.00</u>	<u>3%</u>

1. Optional Yr. <u>OY-4</u> total:	NTE: <u>\$10,000,000.00</u>	<u>100 %</u>
2. Total to be subcontracted to all types of businesses:	<u>\$2,324,500.00</u>	<u>23.5 %</u>
A. Subcontracted to Small Business:	<u>\$1,964,202.00</u>	<u>84.5 %</u>
B. Subcontracted to HUBZone Small Businesses:	<u>\$ 58,113.00</u>	<u>2.5%</u>
C. Subcontracted to Small Disadvantaged Businesses:	<u>\$116,225.00</u>	<u>5 %</u>
D. Subcontracted to Women-Owned Small Businesses:	<u>\$116,225.00</u>	<u>5 %</u>
E. Subcontracted to Veteran-owned Small Businesses:	<u>\$ 69,735.00</u>	<u>3%</u>

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE		PAGE OF PAGES 1	
2. AMENDMENT/MODIFICATION NO. 0013		3. EFFECTIVE DATE 31-Jul-2001		4. REQUISITION/PURCHASE REQ. NO. W68MD9-0290-1214		5. PROJECT NO.(If applicable)	
6. ISSUED BY USA ENGINEER DISTRICT, SEATTLE ATTN: CENWS-CT P.O. BOX 3755 SEATTLE WA 98124-3755		CODE DACW67		7. ADMINISTERED BY (If other than item 6)		CODE	
				See Item 6			
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)				X		9A. AMENDMENT OF SOLICITATION NO. DACW67-01-R-0001	
				X		9B. DATED (SEE ITEM 11) 13-Nov-2000	
						10A. MOD. OF CONTRACT/ORDER NO.	
						10B. DATED (SEE ITEM 13)	
CODE		FACILITY CODE					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input checked="" type="checkbox"/> is extended, <input type="checkbox"/> is not extended.							
Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
A.THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.							
B.THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).							
C.THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:							
D.OTHER (Specify type of modification and authority)							
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) Main Unit Circuit Breaker Replacement, Various Sites; Washington, Oregon, Idaho, and Montana 1. The purpose of this Amendment is to extend the time and date set for close for receipt of proposals inclusive of the revisions addressed in Amendment P00012 is extended to 28 August 2001, 2:00 p.m. Local Time. 2. NOTICE TO Offerors: Offerors must acknowledge receipt of this amendment by number and date on offer or by telegram. Please mark outside of your envelope in which your offer is enclosed to show amendments received.							
<u>Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.</u>							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)			
15B. CONTRACTOR/OFFEROR _____ (Signature of person authorized to sign)		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA BY _____ (Signature of Contracting Officer)		16C. DATE SIGNED 02-Aug-2001	

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AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE		PAGE OF PAGES 1 2	
2. AMENDMENT/MODIFICATION NO. 0012		3. EFFECTIVE DATE 23-Jul-2001		4. REQUISITION/PURCHASE REQ. NO. W68MD9-0290-1214		5. PROJECT NO.(If applicable)	
6. ISSUED BY USA ENGINEER DISTRICT, SEATTLE ATTN: CENWS-CT P.O. BOX 3755 SEATTLE WA 98124-3755		CODE DACW67		7. ADMINISTERED BY (If other than item 6) See Item 6		CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)				X		9A. AMENDMENT OF SOLICITATION NO. DACW67-01-R-0001	
				X		9B. DATED (SEE ITEM 11) 13-Nov-2000	
						10A. MOD. OF CONTRACT/ORDER NO.	
						10B. DATED (SEE ITEM 13)	
CODE		FACILITY CODE					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input checked="" type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
A.THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.							
B.THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).							
C.THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:							
D.OTHER (Specify type of modification and authority)							
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) DACW67-01-R-0001, Main Unit Circuit Breaker Replacement, Various Sites, Washington, Oregon, Idaho and Montana A. This amendment provides for revisions to the schedule, technical specifications, evaluation criteria and incorporation of revised wage determinations as follows:							
<small>Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.</small>							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
_____ (Signature of person authorized to sign)				BY _____ (Signature of Contracting Officer)		23-Jul-2001	

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

1. Revisions to SCHEDULE and associated Section 01270 PAYMENT to adjust required installation sites, quantities and added ITEM 0013 NON-PREPRICED ITEM ALLOWANCE.
 2. Revisions to Specification Section 16050, SF6 Generator Circuit Breaker Installation, paragraph 3.3.2.
 3. Revisions to Section F, DELIVERIES OR PERFORMANCE for changes to locations and priority of work.
 4. Incorporation of Wage Decisions WA010001, Modification 12 dated 7/13/2001; ID010001, Modification 9 dated 7/13/2001; OR010001, Modification 10 dated 7/6/2001 and MT010001, modification 3/23/2001.
 5. Revisions to Section M, incorporation of new evaluation criteria.
- B. The attached revised and new specification pages supercede and replace corresponding specification pages and are to be inserted in sequence. Specification changes are generally identified, for convenience by strikeout for deletions, and underlining of text for additions. All portions of the revised or new pages shall apply whether or not changes have been indicated.
- C. The due date and time for receipt of final proposals is changed to 2:00 PM LOCAL TIME, 7 August 2001.
- D. NOTICE TO OFFERORS: Offers must acknowledge receipt of this amendment by number and date on offer or by telegram. Please mark outside of your envelope in which your offer is enclosed to show amendments received.

Enclosures:

1. Revised WA010001
2. Revised ID010001
3. Revised OR010001
4. Revised MT010001
5. Revised Schedule
6. Revised Section 01270
7. Revised Section 16050
8. Revised Section F
9. Revised Section M

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE		PAGE OF PAGES 1 2	
2. AMENDMENT/MODIFICATION NO. 0011		3. EFFECTIVE DATE 01-Jun-2001		4. REQUISITION/PURCHASE REQ. NO. W68MD9-0290-1214		5. PROJECT NO.(If applicable)	
6. ISSUED BY USA ENGINEER DISTRICT, SEATTLE ATTN: CENWS-CT P.O. BOX 3755 SEATTLE WA 98124-3755		CODE DACW67		7. ADMINISTERED BY (If other than item 6)		CODE	
				See Item 6			
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)				X		9A. AMENDMENT OF SOLICITATION NO. DACW67-01-R-0001	
				X		9B. DATED (SEE ITEM 11) 13-Nov-2000	
						10A. MOD. OF CONTRACT/ORDER NO.	
						10B. DATED (SEE ITEM 13)	
CODE		FACILITY CODE					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input checked="" type="checkbox"/> is extended, <input type="checkbox"/> is not extended.							
Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
A.THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.							
B.THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).							
C.THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:							
D.OTHER (Specify type of modification and authority)							
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) DACW67-01-R-0001, Main Unit Circuit Breaker Replacement, Various Sites, Washington, Oregon, and Idaho A. This amendment provides for incorporation of revised Specifications and wage decisions as follows: 1. The following wage decisions are replaced in their entirety: WA010001 dated 6/1/01, OR010001 dated 6/1/01, ID010001 dated 6/1/01 and MT010001 dated 3/23/01.							
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
_____ (Signature of person authorized to sign)				BY _____ (Signature of Contracting Officer)		01-Jun-2001	

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

2. Revisions to Specification Section 16050, SF6 Generator Circuit Breaker Installation.
 3. Revisions to Specification Section 16353, 15.5 Kv SF6 Circuit Breaker Retrofits.
 4. Revisions to Section J, List of Documents, Exhibits, and Other Attachments
- B. The attached and new pages supercede and replace corresponding pages and are to be inserted in sequence. Specification changes are generally identified, for convenience, by strikeout for deletions, and underling of text for additions. All portions of the revised or new pages shall apply whether or not changes have been indicated.
- C. The due date and time for revised proposals is established as follows: 2:00 PM LOCAL TIME, 15 June 2001.
- D. NOTICE TO OFFERORS: Offers must acknowledge receipt of this amendment by number and date on offer or by telegram. Please mark outside of your envelope in which your offer is enclosed to show amendment received.

Enclosures

1. Revised WA010001
2. Revised OR010001
3. Revised MT010001
4. Revised ID010001
5. Revised Section 16050
6. Revised Section 16353
7. Revised Section J

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE		PAGE OF PAGES 1 2	
2. AMENDMENT/MODIFICATION NO. 0010		3. EFFECTIVE DATE 06-Mar-2001		4. REQUISITION/PURCHASE REQ. NO. W68MD9-0290-1214		5. PROJECT NO.(If applicable)	
6. ISSUED BY USA ENGINEER DISTRICT, SEATTLE ATTN: CENWS-CT P.O. BOX 3755 SEATTLE WA 98124-3755		CODE DACW67		7. ADMINISTERED BY (If other than item 6)		CODE	
				See Item 6			
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)				X		9A. AMENDMENT OF SOLICITATION NO. DACW67-01-R-0001	
				X		9B. DATED (SEE ITEM 11) 13-Nov-2000	
						10A. MOD. OF CONTRACT/ORDER NO.	
						10B. DATED (SEE ITEM 13)	
CODE		FACILITY CODE					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input type="checkbox"/> is extended, <input checked="" type="checkbox"/> is not extended. Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
A.THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.							
B.THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).							
C.THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:							
D.OTHER (Specify type of modification and authority)							
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) DACW67-01-R-0001, Main Unit Circuit Breaker Replacement, Various Sites (Washington, Oregon, and Idaho) A. This amendment provides for incorporation of Davis Bacon Wage Decision MT010001 dated 3/2/2001 and revised Davis Bacon Wage Decisions ID010001 dated 3/2/2001, OR010017 dated 3/2/2001 and WA010001 dated 3/2/2001.							
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
_____ (Signature of person authorized to sign)				BY _____ (Signature of Contracting Officer)		06-Mar-2001	

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

- B. The attached revised and new General Wage Decisions supercede and replace corresponding General Wage Decisions and are to be inserted in sequence into Section J of the solicitation.
- C. The due date and time remains unchanged at 2:00 PM Local Time, 16 March 2001.
- D. NOTICE TO OFFERORS: Offers must acknowledge receipt of this amendment by number and date on offer or by telegram. Please mark the outside of your envelope in which your offer is enclosed to show amendments received.

Enclosures

New MT010001

Revised ID010001

Revised OR010017

Revised WA010001

FROM: US ARMY CORPS OF ENGINEERS
SEATTLE DISTRICT
PO BOX 3755
SEATTLE, WA 98124-2255
(206)764-6696, CENWS-CT-CB-CU, JANET OLSON

1. Refer to Request for Proposal DACW67-01-R-0001, Main Unit Circuit Breaker Replacement, Various Sites (Washington, Oregon, and Idaho) dated 13 November 2000.

2. This is Telegraphic Amendment Number Nine (0009), dated 05 March 2001 which provides for the following:

- a. The time and date set for close for receipt of Proposals is hereby extended to 2:00 p.m. Local Time, 16 March 2001.
- b. Amendment 10 will be issued providing for incorporation of General Wage Decision MT010001.
- b. All other terms and conditions of the solicitation remains unchanged.

3. NOTICE TO OFFERORS: OFFERORS MUST ACKNOWLEDGE RECEIPT OF THIS AMENDMENT BY NUMBER AND DATE ON THE PROPOSAL, OR BY TELEGRAM. PLEASE ALSO MARK THE OUTSIDE OF YOUR ENVELOPE CONTAINING YOUR PROPOSAL TO SHOW AMENDMENTS RECEIVED.

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AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE		PAGE OF PAGES 1 2	
2. AMENDMENT/MODIFICATION NO. 0008		3. EFFECTIVE DATE 26-Feb-2001		4. REQUISITION/PURCHASE REQ. NO. W68MD9-0290-1214		5. PROJECT NO.(If applicable)	
6. ISSUED BY USA ENGINEER DISTRICT, SEATTLE ATTN: CENWS-CT P.O. BOX 3755 SEATTLE WA 98124-3755		CODE DACW67		7. ADMINISTERED BY (If other than item 6) See Item 6		CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)				X		9A. AMENDMENT OF SOLICITATION NO. DACW67-01-R-0001	
				X		9B. DATED (SEE ITEM 11) 13-Nov-2000	
						10A. MOD. OF CONTRACT/ORDER NO.	
						10B. DATED (SEE ITEM 13)	
CODE		FACILITY CODE					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input type="checkbox"/> is extended, <input checked="" type="checkbox"/> is not extended. Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
A.THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.							
B.THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).							
C.THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:							
D.OTHER (Specify type of modification and authority)							
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) DACW67-01-R-0001, Main Unit Circuit Breaker Replacement, Various Sites (Washington, Oregon, and Idaho) A. This amendment provides for incorporation of Davis Bacon General Wage Decisions as follows: WA000001 with 18 modifications dated 12/08/2000 ID000001 with 10 modifications dated 10/20/2000 OR000017 with 15 modifications dated 12/08/2000 B. The attached General Wage Decisions shall be incorporated into Section J of the solicitation. These Decsions are applicable to elements of work classified as construction.							
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
(Signature of person authorized to sign)				BY (Signature of Contracting Officer)		26-Feb-2001	

SECTION J List of Documents, Exhibits and Other Attachments

- C. The due date and time for proposals remains unchanged at 2:00 PM Local Time, March 07, 2001.
- D. NOTICE TO OFFERORS: Offers must acknowledge receipt of this amendment by number and date on offer or by telegram. Please mark the outside of your envelope in which your offer is enclosed to show amendments received.

Enclosures

General Wage Decision WA000001

General Wage Decision ID000001

General Wage Decision OR000017

FROM: US ARMY CORPS OF ENGINEERS
SEATTLE DISTRICT
PO BOX 3755
SEATTLE, WA 98124-2255
(206)764-6696, CENWS-CT-CB-CU, JANET OLSON

1. Refer to Request for Proposal DACW67-01-R-0001, Main Unit Circuit Breaker Replacement, Various Sites (Washington, Oregon, and Idaho) dated 13 November 2000.

2. This is Telegraphic Amendment Number Seven (0007), dated 23 February 2001 which provides for the following:

a. The time and date set for close for receipt of Proposals is hereby extended to 2:00 p.m. Local Time, 07 March 2001.

b. All other terms and conditions of the solicitation remains unchanged.

3. NOTICE TO OFFERORS: OFFERORS MUST ACKNOWLEDGE RECEIPT OF THIS AMENDMENT BY NUMBER AND DATE ON THE PROPOSAL, OR BY TELEGRAM. PLEASE ALSO MARK THE OUTSIDE OF YOUR ENVELOPE CONTAINING YOUR PROPOSAL TO SHOW AMENDMENTS RECEIVED.

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AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE		PAGE 1 OF 2 PAGES	
2. AMENDMENT/MODIFICATION NO. 0006		3. EFFECTIVE DATE 02/13/01		4. REQUISITION/PURCHASE REQ. NO. W68MD9-0290-1214		5. PROJECT NO. (If applicable)	
6. ISSUED BY CODE USA ENGINEER DISTRICT SEATTLE ATTN: CENWS-CT P.O. BOX 3755 SEATTLE, WA 98124-3755		7. ADMINISTERED BY (If other than Item 6) CODE See Item 6					
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)				(X)		9A. AMENDMENT OF SOLICITATION NO.	
				X		DACW67-01-R-0001	
						9B. DATED (SEE ITEM 11) 11/13/00	
						10A. MODIFICATION OF CONTRACT/ORDER NO.	
						10B. DATED (SEE ITEM 13)	
CODE		FACILITY CODE					

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☒ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.

Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. Accounting and Appropriation Data (If required)

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc). SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☐ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

DACW67-01-R-0001, Main Unit Circuit Breaker Replacement, Various Sites (Washington, Oregon, and Idaho)

A. This amendment provides for the following changes:

- (1) Revisions to Section I Contract Clauses to incorporate contract clause 4.9002, Reporting of Contractor Manpower Data Elements (AFARS) FEB 2001.
- (2) Revisions to Specification Section 16050, SF6 Generator Circuit Breaker Installation.
- (3) Revisions to Specification Section 16353, 15.5 Kv SF6 Circuit Breaker Retrofits.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF SIGNER (Type or print)	
		Janet L. Olson, Contracting Officer	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
(Signature of person authorized to sign)		BY (Signature of Contracting Officer)	

NSN 7540-01-152-9070

PREVIOUS EDITION UNUSABLE

Created using PerForm Pro software.

STANDARD FORM 30 (REV. 10-83)

Prescribed by GSA

FAR (48 CFR) 53.243

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

- (4) Revisions to Section M Evaluation Factors for Award, Appendix A1, A2, and A3.
- B. The attached revised and new specification pages supercede and replace corresponding specification pages and are to be inserted in sequence. Specification changes are generally identified, for convenience, by strikeout for deletions, and underlining of text for additions. All portions of the revised or new pages shall apply whether or not changes have been indicated.
- C. The due date and time for proposals remains unchanged at 2:00 PM Local Time, February 28, 2001.
- D. NOTICE TO OFFERORS: Offers must acknowledge receipt of this amendment by number and date on offer or by telegram. Please mark the outside of your envelope in which your offer is enclosed to show amendment received.

Enclosures
Revised Section I
Revised Section 16050
Revised Section 16353
Revised Section M

FROM: US ARMY CORPS OF ENGINEERS
SEATTLE DISTRICT
PO BOX 3755
SEATTLE, WA 98124-2255
(206)764-6696, CENWS-CT-CB-CU, JANET OLSON

1. Refer to Request for Proposal DACW67-01-R-0001, Main Unit Circuit Breaker Replacement, Various Sites (Washington, Oregon, and Idaho) dated 13 November 2000.

2. This is Telegraphic Amendment Number Five (0005), dated 07 February 2001 which provides for the following:

a. The time and date set for close for receipt of Proposals is hereby extended to 2:00 p.m. Local Time, 28 February 2001.

b. All other terms and conditions of the solicitation remains unchanged.

3. NOTICE TO OFFERORS: OFFERORS MUST ACKNOWLEDGE RECEIPT OF THIS AMENDMENT BY NUMBER AND DATE ON THE PROPOSAL, OR BY TELEGRAM. PLEASE ALSO MARK THE OUTSIDE OF YOUR ENVELOPE CONTAINING YOUR PROPOSAL TO SHOW AMENDMENTS RECEIVED.

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AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE		PAGE OF PAGES 1 2	
2. AMENDMENT/MODIFICATION NO. 0004		3. EFFECTIVE DATE 18-Jan-2001		4. REQUISITION/PURCHASE REQ. NO. W68MD9-0290-1214		5. PROJECT NO.(If applicable)	
6. ISSUED BY USA ENGINEER DISTRICT, SEATTLE ATTN: CENWS-CT P.O. BOX 3755 SEATTLE, WA 98124-3755		CODE DACW67		7. ADMINISTERED BY (If other than item 6)		CODE	
				See Item 6			
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)				X		9A. AMENDMENT OF SOLICITATION NO. DACW67-01-R-0001	
				X		9B. DATED (SEE ITEM 11) 13-Nov-2000	
						10A. MOD. OF CONTRACT/ORDER NO.	
						10B. DATED (SEE ITEM 13)	
CODE		FACILITY CODE					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input type="checkbox"/> is extended, <input checked="" type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the document; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN THE REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
A.THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.							
B.THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).							
C.THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:							
D.OTHER (Specify type of modification and authority)							
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) DACW67-01-R-0001, MAIN CIRCUIT BREAKER REPLACEMENT, VARIOUS SITES, WASHINGTON, OREGON AND IDAHO AMENDMENT NO. FOUR A. This amendment provides for the following changes: (1) Revisions to Specification Section 16050, SF6 Generator Circuit Breaker Installation (2) Revisions to Specificaion Section 16353, 15.5 Kv SF6 Circuit Breaker Retrofits (3) Revisions to Solicitation Section F, Paragraph F, Paragraph "Time of Delivery for Task Orders"							
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) BONILIE L LACKEY / CONTRACT SPECIALIST			
15B. CONTRACTOR/OFFEROR _____ (Signature of person authorized to sign)		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA BY _____ (Signature of Contracting Officer)		16C. DATE SIGNED 18-Jan-2001	

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

B. The attached revised and new specification pages supersede and replace corresponding specification pages and are to be inserted in sequence. Specification changes are generally identified for convenience, by strikeout for deletions, and underlining of text for additions. All portions of the revised or new pages shall apply whether or not changes have been indicated.

C. The due date and time for proposals remains unchanged as follows: 14 February 2001 at 2:00 p.m. local time.

D. NOTICE TO OFFERORS: Offerors must acknowledge receipt of this amendment by number and date on offer or by telegram. Please mark outside of your envelope in which your offer is enclosed to show amendment received.

ENCL

Section 16050

Section 16353

Section F

FROM: US ARMY CORPS OF ENGINEERS
SEATTLE DISTRICT
PO BOX 3755
SEATTLE, WA 98124-2255
(206)764-6696, CENWS-CT-CB-CU, JANET OLSON

1. Refer to Request for Proposal DACW67-01-R-0001, Main Unit Circuit Breaker Replacement, Various Sites (Washington, Oregon, and Idaho) dated 13 November 2000.
2. This is Telegraphic Amendment Number Three (0003), dated 10 January 2001 which provides for the following:
 - a. Site Visit information is updated as follows:

<u>Project</u>	<u>POC</u>	<u>Dates</u>
Libby	Werner	30 January 2001 PM (1300-1700)
Libby	Werner	31 January 2001 AM (0800-1200)
 - b. The time and date set for close for receipt of Proposals is hereby extended to 2:00 p.m. Local Time, 14 February 2001.
 - c. All other terms and conditions of the solicitation remains unchanged.
3. NOTICE TO OFFERORS: OFFERORS MUST ACKNOWLEDGE RECEIPT OF THIS AMENDMENT BY NUMBER AND DATE ON THE PROPOSAL, OR BY TELEGRAM. PLEASE ALSO MARK THE OUTSIDE OF YOUR ENVELOPE CONTAINING YOUR PROPOSAL TO SHOW AMENDMENTS RECEIVED.

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FROM: US ARMY ENGR DISTRICT, SEATTLE
PO Box 3755
Seattle, WA 98124-3755
Bonnie Lackey, CENWS-CT-CB-CU, (206)764-4481

1. Refer to Request for Proposal No. DACW67-01-R-0001 entitled " Main Unit Circuit Breaker Replacement Various Sites, Washington, Oregon and Idaho" dated 13 November 2000.

2. This is Amendment 0002, dated 8 December 2000, provides for the following changes:

Information Page—2, Site Visit Information. Site Visits scheduled at Libby Dam for December 12 and December 13, 2000 are hereby cancelled. Further information will be forthcoming.

SF 33, Block 9, Solicitation, Sealed offer due date is changed from 31 January 2000 to 31 January 2001.

3. The due date and time for receipt of proposals remains unchanged at 31 January 2001, 2:00 p.m. Local Time.

4. Notice to Offerors: Offerors must acknowledge receipt of this amendment by number and date on offer or by telegram. Please mark outside of your envelope in which your offer is enclosed to show amendment received.

5. No confirmation copy will be mailed.

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AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE		PAGE OF PAGES	
				1		2	
2. AMENDMENT/MODIFICATION NO. 0001		3. EFFECTIVE DATE 06-Dec-2000		4. REQUISITION/PURCHASE REQ. NO. W68MD9-0290-1214		5. PROJECT NO.(If applicable)	
6. ISSUED BY USA ENGINEER DISTRICT, SEATTLE ATTN: CENWS-CT P.O. BOX 3755 SEATTLE, WA 98124-3755		CODE DACW67		7. ADMINISTERED BY (If other than item 6) See Item 6		CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)				X		9A. AMENDMENT OF SOLICITATION NO. DACW67-01-R-0001	
				X		9B. DATED (SEE ITEM 11) 13-Nov-2000	
						10A. MOD. OF CONTRACT/ORDER NO.	
						10B. DATED (SEE ITEM 13)	
CODE		FACILITY CODE					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input type="checkbox"/> is extended, <input checked="" type="checkbox"/> is not extended.							
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the document; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN THE REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
A.THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.							
B.THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).							
C.THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:							
D.OTHER (Specify type of modification and authority)							
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) Main Unit Circuit Breaker Replacement,Various Sltes (Washington, Oregon, & Idaho) A. This amendment one (0001) provides for the following changes: (1) Revisions to Section 16353, 15.5 Kv SF6 Circuit Breaker Retrofits. B. The attached revised and new specification pages supersede and replace corresponding specification pages and are to be inserted in sequence. Specification changes are generally identified, for convenience, by strikeout or deletions, and underlining of text for additions. All portions of the revised or new pages shall apply whether or not changes have been indicated.							
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) JANET L OLSON / CONTRACTING OFFICER			
15B. CONTRACTOR/OFFEROR _____ (Signature of person authorized to sign)		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA BY _____ (Signature of Contracting Officer)		16C. DATE SIGNED 06-Dec-2000	

- C. The due date and time for proposals remains unchanged as follows: 31 Jan 2001 at 2:00 p.m. local time.
- D. NOTICE TO OFFERORS: Offerors must acknowledge receipt of this amendment by number and date on offer or by telegram. Please mark outside of your envelope in which your offer is enclosed to show amendment received.

ENCL

Section 16353

SECTION C

DESCRIPTIVE/SPECIFICATIONS

TABLE OF CONTENTS

PART 1 GENERAL

- 1.1 DESCRIPTION OF WORK
- 1.2 SPECIFICATIONS
- 1.3 DEFINITIONS
- 1.4 PERFORMANCE OF SERVICES
- 1.5 EQUIPMENT, SUPPLIES, DOCUMENTS AND DATA

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

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SECTION C

DESCRIPTIVE/SPECIFICATIONS

PART 1 GENERAL

1.1 DESCRIPTION OF WORK

The Contractor is to design, manufacture, deliver and install station-type generator circuit breaker retrofits for application to main generator air-blast circuit breakers used at hydro powerhouses within the Federal Columbia River Power System. All work shall be in accordance with the specifications, requirements and operations as generally described in this contract and each task order.

1.2 SPECIFICATIONS

Technical specifications listed below cover the detailed requirements for the equipment and services listed in the Schedule (Section B Supplies or Services and Price/Costs):

<u>SECTION</u>	<u>TITLE</u>
01010	CONTRACTOR'S SITE OPERATIONS
01270	PAYMENT
01310	PROJECT MANAGEMENT
01330	SUBMITTAL OF CONTRACT DATA
01350	ENVIRONMENTAL PROTECTION
01770	CLOSEOUT PROCEDURES AND SUBMITTALS
01782	OPERATION AND MAINTENANCE DATA
02090	LEAD-BASE PAINT (LBP) ABATEMENT AND DISPOSAL
05101	METALWORK FABRICATION, MACHINE WORK, MISCELLANEOUS PROVISIONS
13280	ASBESTOS ABATEMENT
16050	SF6 GENERATOR CIRCUIT BREAKER INSTALLATION
16353	15.5 kV SF6 CIRCUIT BREAKER RETROFITS

1.3 DEFINITIONS

1.3.1 Directed, Required, Ordered, Designated, Prescribed

Wherever in the specifications or upon the drawings the words "directed," "required," "ordered," "designated," "prescribed," or words of like import are used, it shall be understood that the "direction," "requirement," "order," "designation," or "prescription" of the Contracting Officer is intended and similarly the words "approved," "acceptable," "satisfactory," or words of like import shall mean "approved by," or "acceptable to," or "satisfactory to" the Contracting Officer unless otherwise expressly stated.

1.3.2 As Shown, As Indicated, As Detailed

Where "as shown," "as indicated," "as detailed," or words of similar import are used, it shall be understood that the reference is made to the drawings accompanying this contract unless

stated otherwise. The word "provided" as used herein shall be understood to mean "provided complete in-place," that is "furnished and installed."

(FAR 52.236-21 (b and c).)

1.3.3 Contracting Officer (CO), Contracting Officer's Representative (COR)

Wherever in these specifications or upon the drawings the words "Contracting Officer" (CO) or "Contracting Officer's Representative" (COR), are used, it shall be understood to also mean "Government" unless otherwise expressly stated.

1.3.4 Government Quality Assurance Representative (GQAR)

Wherever in these specifications the word "GQAR" is used, it shall be understood to mean "Government Quality Assurance Representative," unless otherwise stated.

1.3.5 Weekend(s)

Wherever in these specifications the word "weekend(s)" is used, it shall be understood to mean "Saturday, Sunday and Federal Holidays," unless otherwise expressly stated.

1.4 PERFORMANCE OF SERVICES

1.4.1 Rendering Service.

This is an indefinite-quantity contract (see Section H, paragraph H-1 Indefinite Quantity). The Contractor shall provide the required supplies and services as ordered by the issuance of individual task orders by the Contracting Officer during the contract period (see Section H, paragraph H-2 Ordering Information). The Contractor's site operations shall conform to the requirements as specified in Section 01010 Contractor's Site Operations. Individual Task Orders may identify additional site specific requirements or modifications to the requirements as specified. In case of an emergency the Contractor shall be capable of supporting site work seven days a week for twenty four (24) hours each day.

1.4.2 Designation of Program Manager.

Within five calendar days from the date of award, the Contractor shall notify the Government as to whom it has designated as the Program Manager for the work to be performed under this contract. The Program Manager shall serve as the point of contact between the Government and the Contractor and shall have full authority to act on behalf of the Contractor. See specific requirements under Section 01310, PROJECT MANAGEMENT.

1.5 EQUIPMENT, SUPPLIES, DOCUMENTS AND DATA

Specific equipment, materials, documents and data to be furnished by the Contractor will be detailed in individual Task Orders, as applicable. Section H, paragraph H-3 Ordering Procedures for Task Orders provides a complete explanation of the Task Order process from the issuing of the Task Order Request for Proposal by the Government through the negotiation and award of the Task Order.

SECTION E Inspection and Acceptance

CLAUSES INCORPORATED BY FULL TEXT

52.246-2 INSPECTION OF SUPPLIES--FIXED-PRICE (AUG 1996)

(a) Definition. "Supplies," as used in this clause, includes but is not limited to raw materials, components, intermediate assemblies, end products, and lots of supplies.

(b) The Contractor shall provide and maintain an inspection system acceptable to the Government covering supplies under this contract and shall tender to the Government for acceptance only supplies that have been inspected in accordance with the inspection system and have been found by the Contractor to be in conformity with contract requirements. As part of the system, the Contractor shall prepare records evidencing all inspections made under the system and the outcome. These records shall be kept complete and made available to the Government during contract performance and for as long afterwards as the contract requires. The Government may perform reviews and evaluations as reasonably necessary to ascertain compliance with this paragraph. These reviews and evaluations shall be conducted in a manner that will not unduly delay the contract work. The right of review, whether exercised or not, does not relieve the Contractor of the obligations under the contract.

(c) The Government has the right to inspect and test all supplies called for by the contract, to the extent practicable, at all places and times, including the period of manufacture, and in any event before acceptance. The Government shall perform inspections and tests in a manner that will not unduly delay the work. The Government assumes no contractual obligation to perform any inspection and test for the benefit of the Contractor unless specifically set forth elsewhere in this contract.

(d) If the Government performs inspection or test on the premises of the Contractor or a subcontractor, the Contractor shall furnish, and shall require subcontractors to furnish, at no increase in contract price, all reasonable facilities and assistance for the safe and convenient performance of these duties. Except as otherwise provided in the contract, the Government shall bear the expense of Government inspections or tests made at other than the Contractor's or subcontractor's premises; provided, that in case of rejection, the Government shall not be liable for any reduction in the value of inspection or test samples.

(e)(1) When supplies are not ready at the time specified by the Contractor for inspection or test, the Contracting Officer may charge to the Contractor the additional cost of inspection or test.

(2) The Contracting Officer may also charge the Contractor for any additional cost of inspection or test when prior rejection makes reinspection or retest necessary.

(f) The Government has the right either to reject or to require correction of nonconforming supplies. Supplies are nonconforming when they are defective in material or workmanship or are otherwise not in conformity with contract requirements. The Government may reject nonconforming supplies with or without disposition instructions.

(g) The Contractor shall remove supplies rejected or required to be corrected. However, the Contracting Officer may require or permit correction in place, promptly after notice, by and at the expense of the Contractor. The Contractor shall not tender for acceptance corrected or rejected supplies without disclosing the former rejection or requirement for correction, and, when required, shall disclose the corrective action taken.

(h) If the Contractor fails to promptly remove, replace, or correct rejected supplies that are required to be removed or to be replaced or corrected, the Government may either (1) by contract or otherwise, remove, replace, or correct the supplies and charge the cost to the Contractor or (2) terminate the contract for default. Unless the Contractor corrects or replaces the supplies within the delivery schedule, the Contracting Officer may require their delivery and make an equitable price reduction. Failure to agree to a price reduction shall be a dispute.

(i)(1) If this contract provides for the performance of Government quality assurance at source, and if requested by the Government, the Contractor shall furnish advance notification of the time (i) when Contractor inspection or tests will be performed in accordance with the terms and conditions of the contract and (ii) when the supplies will be ready for Government inspection.

(2) The Government's request shall specify the period and method of the advance notification and the Government representative to whom it shall be furnished. Requests shall not require more than 2 workdays of advance notification if the Government representative is in residence in the Contractor's plant, nor more than 7 workdays in other instances.

(j) The Government shall accept or reject supplies as promptly as practicable after delivery, unless otherwise provided in the contract. Government failure to inspect and accept or reject the supplies shall not relieve the Contractor from responsibility, nor impose liability on the Government, for nonconforming supplies.

(k) Inspections and tests by the Government do not relieve the Contractor of responsibility for defects or other failures to meet contract requirements discovered before acceptance. Acceptance shall be conclusive, except for latent defects, fraud, gross mistakes amounting to fraud, or as otherwise provided in the contract.

(l) If acceptance is not conclusive for any of the reasons in paragraph (k) hereof, the Government, in addition to any other rights and remedies provided by law, or under other provisions of this contract, shall have the right to require the Contractor (1) at no increase in contract price, to correct or replace the defective or nonconforming supplies at the original point of delivery or at the Contractor's plant at the Contracting Officer's election, and in accordance with a reasonable delivery schedule as may be agreed upon between the Contractor and the Contracting Officer; provided, that the Contracting Officer may require a reduction in contract price if the Contractor fails to meet such delivery schedule, or (2) within a reasonable time after receipt by the Contractor of notice of defects or nonconformance, to repay such portion of the contract as is equitable under the circumstances if the Contracting Officer elects not to require correction or replacement. When supplies are returned to the Contractor, the Contractor shall bear the transportation cost from the original point of delivery to the Contractor's plant and return to the original point when that point is not the Contractor's plant. If the Contractor fails to perform or act as required in (1) or (2) above and does not cure such failure within a period of 10 days (or such longer period as the Contracting Officer may authorize in writing) after receipt of notice from the Contracting Officer specifying such failure, the Government shall have the right by contract or otherwise to replace or correct such supplies and charge to the Contractor the cost occasioned the Government thereby.

52.246-4 INSPECTION OF SERVICES--FIXED-PRICE (AUG 1996)

(a) Definitions. "Services," as used in this clause, includes services performed, workmanship, and material furnished or utilized in the performance of services.

(b) The Contractor shall provide and maintain an inspection system acceptable to the Government covering the services under this contract. Complete records of all inspection work performed by the Contractor shall be maintained and made available to the Government during contract performance and for as long afterwards as the contract requires.

(c) The Government has the right to inspect and test all services called for by the contract, to the extent practicable at all times and places during the term of the contract. The Government shall perform inspections and tests in a manner that will not unduly delay the work.

(d) If the Government performs inspections or tests on the premises of the Contractor or a subcontractor, the Contractor shall furnish, and shall require subcontractors to furnish, at no increase in contract price, all reasonable facilities and assistance for the safe and convenient performance of these duties.

(e) If any of the services do not conform with contract requirements, the Government may require the Contractor to perform the services again in conformity with contract requirements, at no increase in contract amount. When the

defects in services cannot be corrected by reperformance, the Government may (1) require the Contractor to take necessary action to ensure that future performance conforms to contract requirements and (2) reduce the contract price to reflect the reduced value of the services performed.

(f) If the Contractor fails to promptly perform the services again or to take the necessary action to ensure future performance in conformity with contract requirements, the Government may (1) by contract or otherwise, perform the services and charge to the Contractor any cost incurred by the Government that is directly related to the performance of such service or (2) terminate the contract for default.

52.246-12 INSPECTION OF CONSTRUCTION (AUG 1996)

(a) Definition. "Work" includes, but is not limited to, materials, workmanship, and manufacture and fabrication of components.

(b) The Contractor shall maintain an adequate inspection system and perform such inspections as will ensure that the work performed under the contract conforms to contract requirements. The Contractor shall maintain complete inspection records and make them available to the Government. All work shall be conducted under the general direction of the Contracting Officer and is subject to Government inspection and test at all places and at all reasonable times before acceptance to ensure strict compliance with the terms of the contract.

(c) Government inspections and tests are for the sole benefit of the Government and do not--

(1) Relieve the Contractor of responsibility for providing adequate quality control measures;

(2) Relieve the Contractor of responsibility for damage to or loss of the material before acceptance;

(3) Constitute or imply acceptance; or

(4) Affect the continuing rights of the Government after acceptance of the completed work under paragraph (i) of this section.

(d) The presence or absence of a Government inspector does not relieve the Contractor from any contract requirement, nor is the inspector authorized to change any term or condition of the specification without the Contracting Officer's written authorization.

(e) The Contractor shall promptly furnish, at no increase in contract price, all facilities, labor, and material reasonably needed for performing such safe and convenient inspections and tests as may be required by the Contracting Officer. The Government may charge to the Contractor any additional cost of inspection or test when work is not ready at the time specified by the Contractor for inspection or test, or when prior rejection makes reinspection or retest necessary. The Government shall perform all inspections and tests in a manner that will not unnecessarily delay the work. Special, full size, and performance tests shall be performed as described in the contract.

(f) The Contractor shall, without charge, replace or correct work found by the Government not to conform to contract requirements, unless in the public interest the Government consents to accept the work with an appropriate adjustment in contract price. The Contractor shall promptly segregate and remove rejected material from the premises.

(g) If the Contractor does not promptly replace or correct rejected work, the Government may (1) by contract or otherwise, replace or correct the work and charge the cost to the Contractor or (2) terminate for default the Contractor's right to proceed.

(h) If, before acceptance of the entire work, the Government decides to examine already completed work by removing it or tearing it out, the Contractor, on request, shall promptly furnish all necessary facilities, labor, and material. If the work is found to be defective or nonconforming in any material respect due to the fault of the Contractor or its subcontractors, the Contractor shall defray the expenses of the examination and of satisfactory reconstruction. However, if the work is found to meet contract requirements, the Contracting Officer shall make an equitable adjustment for the additional services involved in the examination and reconstruction, including, if completion of the work was thereby delayed, an extension of time.

(i) Unless otherwise specified in the contract, the Government shall accept, as promptly as practicable after completion and inspection, all work required by the contract or that portion of the work the Contracting Officer determines can be accepted separately. Acceptance shall be final and conclusive except for latent defects, fraud, gross mistakes amounting to fraud, or the Government's rights under any warranty or guarantee.

52.246-15 CERTIFICATE OF CONFORMANCE (APR 1984)

(a) When authorized in writing by the cognizant Contract Administration Office (CAO), the Contractor shall ship with a Certificate of Conformance any supplies for which the contract would otherwise require inspection at source. In no case shall the Government's right to inspect supplies under the inspection provisions of this contract be prejudiced. Shipments of such supplies will not be made under this contract until use of the Certificate of Conformance has been authorized in writing by the CAO, or inspection and acceptance have occurred.

(b) The Contractor's signed certificate shall be attached to or included on the top copy of the inspection or receiving report distributed to the payment office or attached to the CAO copy when contract administration (Block 10 of the DD Form 250) is performed by the Defense Contract Administration Services. In addition, a copy of the signed certificate shall also be attached to or entered on copies of the inspection or receiving report accompanying the shipment.

(c) The Government has the right to reject defective supplies or services within a reasonable time after delivery by written notification to the Contractor. The Contractor shall in such event promptly replace, correct, or repair the rejected supplies or services at the Contractor's expense.

(d) The certificate shall read as follows:

"I certify that on _____ [insert date], the _____ [insert Contractor's name] furnished the supplies or services called for by Contract No. _____ via _____ [Carrier] on _____ [identify the bill of lading or shipping document] in accordance with all applicable requirements. I further certify that the supplies or services are of the quality specified and conform in all respects with the contract requirements, including specifications, drawings, preservation, packaging, packing, marking requirements, and physical item identification (part number), and are in the quantity shown on this or on the attached acceptance document."

Date of Execution: _____

Signature: _____

Title: _____

SECTION E
INSPECTION AND ACCEPTANCE

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SECTION E

INSPECTION AND ACCEPTANCE

E-1 SUPPLY QUALITY MANAGEMENT, CONTRACTOR QUALITY CONTROL

E-1.1 General Information

An effective Contractor's Quality Control (CQC) inspection system shall be established and maintained in compliance with contract clause, INSPECTION OF SUPPLIES - FIXED PRICE. The CQC inspection system shall include but not limited to plans, procedures, and organization necessary to provide materials, equipment, workmanship, fabrication, construction, safety, and operations which comply with the requirements specified in the Technical Sections.

E-1.2 Submittals

The following submittals described in detail in the referenced paragraphs shall be submitted for approval in accordance with SECTION 01330 SUBMITTAL OF CONTRACT DATA.

- a. Quality control plan (paragraph E-1.3).
- b. Qualifications of laboratories (paragraph E-1.7).

E-1.3 Quality Control Plan

Not more than 30 days after receipt of signed contract, the Contractor shall submit for approval the Quality Control (QC) Plan. If an acceptable plan is not obtained prior to the date specified, the Contracting Officer may refuse to allow work to begin or withhold funds from payment, in accordance with Contract Clause, METHODS OF PAYMENT, until such time that an acceptable CQC plan is submitted. The Contractor's standard factory QC plan or modification thereof may be used as long as it contains the following salient features:

- a. A description, including names and responsibilities, of the QC organization hierarchy.
- b. Procedures to be used to manage submittals and to ensure compliance with the approved submittals and the contract requirements.
- c. Procedures for ensuring compliance with the contract requirements when using subcontractors and testing laboratories.
- d. Specific tests and inspections during salient phases of work used to verify QC plan is functioning properly.
- e. Actions taken when material are found to be not in conformance with the contractual requirements.
- f. Procedures for inspections and acceptance for delivered materials (whether bulk or assembled/manufactured equipment)

g. Description of record keeping kept to document the progress, parts and components to be supplied.

E-1.4 Submittal Management

Submittals shall be as specified in SECTION 01330 and elsewhere in the Technical Sections. The CQC manager shall be responsible for certifying that all submittals are in compliance with the contract requirements

E-1.5 Acceptance of the Plan

Acceptance of the CQC plan is required prior to the start of work. Acceptance is conditional; and will be predicated on the satisfactory performance during the contract period. The Government reserves the right to require the Contractor to make changes in the CQC plan and operations as necessary to obtain the quality specified.

E-1.6 Notifications of Changes

After acceptance of the CQC plan, the Contracting Officer shall be notified in writing of any proposed changes to the plan. Proposed changes are subject to approval.

E-1.7 Tests

E-1.7.1 Testing Procedures

Tests that are specified or required shall be performed to verify that control measures are adequate to provide a product which conforms to the contract requirements. The Contractor shall employ the services of an industry recognized testing laboratory or establish an approved testing facility. A list of tests the Contractor intends to perform shall be included as part of the CQC plan submitted.

E-2 FINAL EXAMINATION AND ACCEPTANCE

When all the work specified under a specific task order has been completed, and the work has successfully met the requirements of the task order, the Contracting Officer will make a thorough examination of the work. When the task order work is found to comply with the requirements of the contract, it will be accepted and the Contractor so notified in writing.

E-3 RIGHT TO OPERATE UNSATISFACTORY EQUIPMENT

The Government shall have the right to operate any and all equipment as soon as, and as long as, it is in operating condition whether or not such equipment has been accepted as complete and satisfactory, except that this shall not be construed to permit operation of any equipment which may be materially damaged by such operation before any required alterations or repairs have been made. All repairs or alterations required of the Contractor shall be made by the Contractor at such times as directed by the Contracting Officer. The repairs or alterations shall be made in such a manner and at such time as will cause the minimum interruption in the use of the equipment by the Government.

E-4 INSPECTION

E-4.1 General

The work will be conducted under the general direction of the Contracting Officer and is subject to inspection by the Government's Quality Assurance Representatives to ensure strict compliance with the terms of the contract in accordance with Contract Clause INSPECTION OF SUPPLIES - FIXED PRICE. The Contractor shall keep the Contracting Officer informed as to the general progress of the work and shall notify the Contracting Officer when any item of equipment or component part thereof is ready for testing. Unless otherwise approved or specified in these specifications, the Contractor shall notify the Contracting Officer in writing a minimum of 5 calendar working days prior to any inspections, measurements, tests, or trials. Inspection and/or test reports involving measurements shall include calibration and certification data for the instruments used. No Government Quality Assurance Representative is authorized to change any provision of the specifications without written authorization of the Contracting Officer, nor shall the presence or absence of a Government Quality Assurance Representative relieve the Contractor from any requirements of the contract.

E-4.2 Re-inspection

Inspections requiring the presence of the Contracting Officer, as set forth in this contract, will be re-inspected only once by the Government at its expense.

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SECTION F Deliveries or Performance

CLAUSES INCORPORATED BY FULL TEXT

52.247-34 F.O.B. DESTINATION (NOV 1991)

(a) The term "f.o.b. destination," as used in this clause, means--

(1) Free of expense to the Government, on board the carrier's conveyance, at a specified delivery point where the consignee's facility (plant, warehouse, store, lot, or other location to which shipment can be made) is located; and

(2) Supplies shall be delivered to the destination consignee's wharf (if destination is a port city and supplies are for export), warehouse unloading platform, or receiving dock, at the expense of the Contractor. The Government shall not be liable for any delivery, storage, demurrage, accessorial, or other charges involved before the actual delivery (or "constructive placement" as defined in carrier tariffs) of the supplies to the destination, unless such charges are caused by an act or order of the Government acting in its contractual capacity. If rail carrier is used, supplies shall be delivered to the specified unloading platform of the consignee. If motor carrier (including "piggyback") is used, supplies shall be delivered to truck tailgate at the unloading platform of the consignee, except when the supplies delivered meet the requirements of Item 568 of the National Motor Freight Classification for "heavy or bulky freight." When supplies meeting the requirements of the referenced Item 568 are delivered, unloading (including movement to the tailgate) shall be performed by the consignee, with assistance from the truck driver, if requested. If the contractor uses rail carrier or freight forwarded for less than carload shipments, the contractor shall ensure that the carrier will furnish tailgate delivery, when required, if transfer to truck is required to complete delivery to consignee.

(b) The Contractor shall--

(1)(i) Pack and mark the shipment to comply with contract specifications; or

(ii) In the absence of specifications, prepare the shipment in conformance with carrier requirements;

(2) Prepare and distribute commercial bills of lading;

(3) Deliver the shipment in good order and condition to the point of delivery specified in the contract;

(4) Be responsible for any loss of and/or damage to the goods occurring before receipt of the shipment by the consignee at the delivery point specified in the contract;

(5) Furnish a delivery schedule and designate the mode of delivering carrier; and

(6) Pay and bear all charges to the specified point of delivery.

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SECTION F
DELIVERIES OR PERFORMANCE

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SECTION F

DELIVERIES OR PERFORMANCE

F-1 PERIOD OF SERVICE. Day one of the contract is the date of signature by the Contracting Officer. The ordering period for the contract shall automatically end upon completion of the base period, absent an extension. The contract shall include a base period, not-to exceed (NTE) one year and four option periods (NTE one year each), for a total contract performance period NTE five years. One year is defined as 365 consecutive days (or 366 days for a leap year). Each extension of the contract period shall be evidenced by modification to this contract. Only the Contracting Officer and Successor Contracting Officers have authority to modify the contract. Absent any extension, the ordering period shall automatically end upon termination of the base period or any extension period (option year) thereto. Expiration or termination of the ordering period shall not affect performance of any order issued during the effective period of this contract.

F-2 MAXIMUM CONTRACT VALUE. The maximum value of all work awarded under the contract shall be limited to \$10 million for the first year and \$10 million per year for the four option years, up to \$50 million over the life of the contract.

F-3 PURPOSE AND SCOPE OF SERVICES. The purpose of this indefinite-delivery, indefinite-quantity (IDIQ) contract is for the selected contractor on a project-by-project basis to design, fabricate and deliver interrupter assemblies and retrofit them to the existing station class main unit breaker on-site. The Corps owns, operates and maintains 22 hydroelectric powerhouses within the Federal Columbia River Power System (FCRPS). Task Orders for the work will be issued through project offices located in Seattle, Portland and Walla Walla Districts for work at various sites throughout the FCRPS. The Contractor shall provide all materials, supplies and services and perform the operations as generally described in this contract and each task order.

F-4 TIME OF DELIVERY FOR TASK ORDERS

F-4.1 The Contractor shall commence work under a task order within 10 calendar days after award of the task order and shall make delivery of all material and equipment and perform the work specified herein, unless otherwise modified under the task order requirements, in accordance with the following schedule:

a. Schedule Items *****AA shall be completed not later than 130 calendar days after receipt of task order notice to proceed, except time of completion for training will be as negotiated during task order award.

b. Schedule Items *****AB shall be completed not later than 240 calendar days after receipt of task order notice to proceed.

c. Schedule Items *****AC shall be completed not later than 105 calendar days after receipt of task order notice to proceed.

d. Schedule Items *****AD shall be completed not later than 60 calendar days after receipt of task order notice to proceed.

e. Schedule Items *****AE shall be completed in accordance with the schedule negotiated with the issue of the task order.

F-4.2 The tentative priority for the work has been established as follows. However, the Government reserves the right to reprioritize the work within the monetary limitations of paragraph F-2 Maximum Contract Value.

LOCATION	B/Y	OY-1	OY-2	OY-3	OY-4
The Dalles, Units 1-8	4	3	1	0	0
The Dalles, Units 9-14	0	0	2	4	0
The Dalles, Units 15-22	-0 1	0	0	0	0
Bonneville PH-II, Units 11-18	2	2	2	2	0
Chief Joseph, Units 17-27	1	4	3	3	0
Libby, Units 1-4	0	0	0	0	4
Lower Monumental, Units 1-6	0	0	2	2	2
Little Goose, Units 1-6 (3 of 6)	0	0	0	0	3
Lower Granite, Units 1-6 (3 of 6)	0	0	0	0	3
Dworshak, Units 1-2	0	1	1	0	0
Dworshak, Unit 3	0	0	0	0	0
Dworshak, Tie Breaker	0	0	1	0	0
John Day, Units 1-16	0	0	0	0	0
McNary, Units 1-14	0	0	0	0	0
	<u>708</u>	10	12	11	12

NOTE : B/Y = Base Year
OY = Option Year

F-5 DELIVERY AND INSTALLATION

F-5.1 PLACE OF DELIVERY

Equipment and materials supplied under this contract shall be delivered, as indicated in the task order(s), f.o.b. to the Powerhouse at Chief Joseph Dam, Libby Dam, Lower Monumental Dam, Little Goose Dam, Lower Granite Dam, Bonneville II Dam, The Dalles Dam, or Dworshak Dam. Similar work for circuit breaker retrofits may be awarded as required by the Government under a non-prepriced item for John Day Dam or McNary Dam.

F-5.2 SITE OF INSTALLATION

The circuit breaker retrofits shall be installed, as indicated in the task order(s), at the appropriate Powerhouse.

F-6 EXTRA SERVICES.

The Contractor is advised to not perform any services or work under this contract that may be requested by any Government personnel, other than the Contracting Officer or his/her designated representative either orally or in writing, which the Contractor considers to be a change in scope of work or services required by each task order. A request for proposal will be

given to the Contractor along with a modified Statement of Work for any changes to the task order Statement of Work. No work shall commence on changes until the Contractor has received a directive to proceed from the Contracting Officer.

F-7 EXTENT OF SERVICES.

The Government makes no guarantees as to the total amount of services to be required under this contract, and reserves the right to require no services during the contract period, and to obtain similar services from other sources.

F-8 PAYMENT.

Refer to SECTION 01270, PAYMENT for descriptions of Schedule Items.

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SECTION G Contract Administration Data

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G.1 Invoicing Data

- a. Invoices shall be in the form of an ENG Form 93
- b. Submit/mail invoices to: To be completed on each Task Order
- c. All invoices will be identified with the resultant Contract Number and applicable Task Order Number.
- d. Payment will be made by:
USACE Finance Center
ATTN: CEFC-AO-P
5720 Integrity Drive
Millington, TN 38054-5005

G.2 CONTRACT ADMINISTRATION DATA

- A. The contract will be administered by:

US Army Corps of Engineers
Seattle District Office
ATTN: CENWS-CT-CB-CU
P.O. Box 3755
Seattle, WA 98124-3755

- B. Task Order(s) will be administered by each District Contracting Office from which the task order was issued.
The following Districts are authorized to place task orders under this contract:

Seattle District
Portland District
Walla Walla District

G.3 ACCOUNTING AND APPROPRIATION DATA: Will be cited on each individual task order.

G.4 Performance Evaluation of the Contractor

The contractor's performance will be evaluated upon final acceptance of the work. However, interim evaluation may be prepared at any time during contract performance when determined to be in the best interests of the Government. The Contractor will be rated either outstanding, satisfactory, or unsatisfactory in the areas of Contract Quality Control, Timely Performance, Effectiveness of Management, Compliance with Labor Standards and compliance with Safety Standards. The contractor will be advised of any unsatisfactory rating, either in an individual element or in the overall rating, prior to completing the evaluation and all contractor comments will be made a part of the official record. Performance Evaluation Reports will be made available to all DOD contracting offices for their future use in determining contractor responsibility.

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SPECIAL CONTRACT REQUIREMENTS

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SECTION H

SPECIAL CONTRACT REQUIREMENTS

H-1 INDEFINITE QUANTITY (52.216-22 – OCT 1995).

- a. This is an indefinite-quantity contract for the services specified, and effective for the periods stated, in Section F of the contract. Quantities of services specified in the Schedule (Section B) are estimates only and are not purchased by this contract. The Government will only pay the Contractor for the quantities ordered and accepted under Task Orders issued under this contract.
- b. The price schedule for each period of the contract shall be in effect for 365 consecutive days (366 for a leap year).
- c. Performance shall be made only as authorized by Task Orders issued in accordance with this section of the contract. The Contractor shall furnish to the Government, when and if ordered, the services specified in the Schedule up to and including the maximum amount specified under Section F DELIVERIES OR PERFORMANCE, Clause "Maximum Contract Value."
- d. The Government is not obligated to fund the maximum cumulative dollar amount of this contract. Each Task Order will have funds obligated on an individual basis. The Government intends to order a minimum of two percent (2%) of the maximum possible amount for the base year and, if the option years are exercised, one percent (1%) of the maximum possible option amount. Should the Government fail to order this amount of services during the applicable contract period, the Contractor may submit a claim as provided in the contract clause entitled "Disputes." In no event will the Government's liability under this circumstance exceed 2% of the maximum possible amount for the base period and, if the option years are exercised, 1% of the maximum possible option amount. The minimum-guarantee amount for the base year is \$200,000. The minimum-guarantee amount for each option year exercised is \$100,000.
- e. The Contractor will be compensated at the rates shown in Section B, PRICE SCHEDULE, for the duration of the contract.

H-2 ORDERING INFORMATION.

- a. Any supplies and services to be furnished under this contract shall be ordered by issuance of Task Orders by the individuals or activities designated in this contract. Such orders may be issued for the base and option periods in accordance with Section F DELIVERIES OR PERFORMANCE, clause "Period Of Service."
- b. If mailed, a Task Order is considered "issued" when the Government deposits the order in the mail. Orders may be issued orally, by facsimile, or by electronic commerce methods.

c. The rights and obligations of the parties to this contract shall be subject to and governed by the provisions of this contract and the provisions of all Task Orders issued hereunder. To the extent of any inconsistency between the contract and a Task Order, provisions of this contract shall control.

d. The Contractor shall ensure that all contract work is completed in accordance with the time allowances and progress schedule set forth in each Task Order. The schedule is subject to adjustment by the Contracting Officer or duly authorized representative, in writing, for material delays on the part of the Government and for conditions beyond the control of the parties hereto.

H-3. ORDERING PROCEDURES FOR TASK ORDERS.

a. Issuing A Task Order RFP. When the Government requires work under this Contract, a Request for Proposal (RFP) will be issued. Each RFP will typically consist of the following:

1) A statement of work describing the services to be performed, which may include special instructions and conditions including sequence of work, and a set of sketches or drawings to define the basis of work for the order. Presentations and briefings may also be required. Other products may be required as detailed under the task order.

2) Applicable bid items with estimated quantities from the schedule;

3) Liquidated damages to be assessed for non-completion of the work

4) Schedule for task order preparation and work execution;

5) If applicable, the RFP will also indicate the time and date for a joint site visit (scoping meeting). Joint site visits may be accomplished in connection with each Task Order, prior to final agreement, to resolve any work requirements or a meeting may be held in person to discuss particulars of the work.

b. Bonds. No bid bond or bid guarantee will be required for individual Task Orders.

c. Incidental Costs. The Contractor will not be reimbursed for attendance during negotiations, site visits, or other pre-Task Order costs.

d. Submission Of Proposal By Contractor.

The time frame for submission of Contractor's proposal will vary between 1 and 30 calendar days depending on the urgency and complexity of the work. The Contractor shall respond within the number of calendar days stated in the RFP by submitting a proposal to the Contracting Officer, or authorized representative, in accordance with the requirements stated in the RFP. Unless otherwise indicated in the RFP, proposals shall contain the following:

1) Proposed quantities for line items stated in the RFP, and any others materials or tasks that may be applicable;

2) Non-prepriced items (e.g., materials or tasks) broken out and separately priced. Include three price quotes from different manufacturers/suppliers for each item. Quotes shall be signed by an authorized representative of the manufacturer;

3) A completion schedule;

4) All submittals and documentation required by the contract to indicate that adequate layout, set-up, and planning to accomplish the work have been done.

5) Lump-sum price for all work to be performed under the Task Order.

e. Negotiation And Award Of Task Orders.

1) Proposals will either be accepted as is or negotiated to the mutual agreement of both the Government and the Contractor. Upon conclusion of satisfactory discussions or negotiations (if required), a Task Order will be issued by the Contracting Officer reflecting the negotiated order price and payment terms as outlined in the statement of work or specifications. In any instance where there is failure to reach agreement on price, the Government reserves the right to withdraw the project and have it completed by other means. The awarded Task Order will be firm fixed-price with a specific completion date.

2) Task Orders will be issued on DD Form 1155. Orders may be placed via mail, telephone, facsimile or electronic commerce. The Task Order becomes binding when the Contracting Officer signs the Order. Notice to Proceed (NTP) will be issued separately after receipt of acceptable performance and payment bonds or alternate payment protections. Issuing and payment offices will be cited on each Task Order.

f. Plans And Specifications. The Contractor will be provided one (1) copy of the Project Drawings and Statement of Work (with pertinent supplemental specifications) upon issue of each Task Order. All further reproduction shall be at the Contractor's expense. The Government may provide these as hard copy or as electronic media, such as e-mail or CD ROM, at its option.

H-4. OPTION FOR INCREASED QUANTITY. In any Task Order awarded under this contract, the Government may elect to make certain portions of the work, as described in the Statement of Work, optional. In Task Orders containing such options, the Government, at its discretion, may increase the quantity of work awarded by exercising one or more of the optional items at any time, or not at all, but no later than the number of calendar days stated in the individual Task Order. Notice to proceed on work items added by exercise of the option(s) may be given by Contracting Officer verbally or in writing. The completion schedule for the optional work that is awarded shall be based on receipt by the Contractor of either written or verbal notice to proceed, whichever is sooner.

a. Prior to exercising the optional bid items, the Government will give the contractor at least 30 days preliminary notice of its intention to exercise the optional items. However such notice will not be deemed to commit the Government to exercise that option.

b. The time allowed for completion of any optional items awarded under this contract is specified under Section F clause "Time of Delivery for Task Orders", and will be measured from

the date of receipt of the notice to proceed for the base item(s) under the Task Order unless otherwise specified.

H-5. SUBCONTRACTOR

a. Provisions in Subcontract. The Contractor shall cause appropriate provisions to be inserted in all subcontracts relating to this contract, and insure sufficient fulfillment by subcontractors of all contractual provisions.

b. Relationship Between Subcontractor and Government. Nothing contained in this contract shall be construed as a contractual relationship between any subcontractor and the Government.

c. Approval of Subcontractors. Prior to award of any Task Order in which subcontractors will be utilized, the Contractor shall provide, in writing, a list of all the subcontractors, a statement to the extent and character of the work to be done under subcontract and the following information:

1) Name and designation.

2) Experience with respect to performing their element(s) of work as referenced in the Detailed Statement of Work for each individual task order.

d. Once a subcontractor is submitted with a proposal, and award has been made, the contractor cannot change subcontractors unless justification has been made in writing and Contracting Officer approves.

e. Subcontractor's Performance. If for sufficient reason at any time during the performance of the work for any task order, it is determined that any subcontractor is incompetent, or is not performing the work in an acceptable manner, the Contractor shall be notified in writing accordingly. Immediate steps shall be taken by the Contractor to obtain acceptable performance or cancel such subcontracts. Subletting by subcontractors shall be subject to the same requirement. The Contractor shall be responsible for all costs relating to delay and disruption under this provision.

H-6. COMMENCEMENT, PROSECUTION AND COMPLETION OF WORK

The contractor(s) shall not begin any work under any task order until receipt of written notice to Proceed.

H-7. LIQUIDATED DAMAGES (APR 1984)

Liquidated damages will be applied, if applicable, under the site specific task orders.

H-8. TIME EXTENSIONS

Notwithstanding any other provisions of this contract, it is mutually understood that the time extensions for changes in the work will depend upon the extent, if any, by which the changes cause delay in the completion of the various elements of the work. The change order granting

the time extension may provide that the task order completion date will be extended only for those specific work elements so delayed and that the remaining contract completion dates for all other portions of the work will not be altered and may further provide for an equitable readjustment of liquidated damages under the new completion schedule.

H-9. INSURANCE REQUIRED

In accordance with the contract clause: "Insurance Work on a Government Installation," the contractor shall procure the following minimum insurance:

Type	Amount
Workmen Compensation and Employer's Liability Insurance	\$100,000
General Liability Insurance	\$500,000 per occurrence
Automobile Liability Insurance Bodily injury	\$200,000 per person and \$500,000 per occurrence
Property Damage	\$ 20,000 per occurrence

Additional insurance may be required on individual task orders.

H-10. SITE CONDITIONS

a. Transportation Facilities. The Contractor shall make its own investigation of the conditions of existing public and private roads and of clearances, restrictions, bridge load limits and other limitations affecting transportation and ingress and egress at the delivery site.

H-11. CONTRACTOR SUBMITTALS.

In the event major items are to be modified from the original design, shop drawings shall be prepared in strict accordance with the design details of the existing system design. These drawings shall be clear, complete and thoroughly checked and shall be approved by the Contracting Officer prior to fabrication or installation of such items. Submittals shall be made in accordance with Section 01330, Submittal of Contract Data.

H-12. GOVERNMENT FURNISHED PROPERTY

Any Government-furnished property to be used under this contract shall be identified on individual task orders. The contractor shall, with his own forces, inspect the Government furnished property for condition and suitability for use, and shall transport all Government-furnished equipment/materials described on the task order. The equipment/materials shall be transported from the Government storage area to the worksite indicated on the task order. The contractor shall assume the risk and responsibility for the loss or damage to Government furnished property. The contractor shall follow the instructions of the Contracting officers Representative regarding the, disposition of all government furnished property not consumed in performance of a task order.

H-13. SAFETY

A task order may require the contractor and the subcontractor(s) to work in a Government operating facility. The Contractor shall conform to all safety provisions in accordance with the U.S. Army Corps of Engineers Safety and Health Requirements Manual, EM 385-1-1, most current edition, applicable Corps District Regulations, and all applicable Federal, state and local laws. The Contractor shall assure that all of its employees have the appropriate personal safety equipment, as required. Copies of EM 385-1 -1 will be provided upon request. The Contractor shall comply with the safe clearance procedures

H-14. CONTRACT DRAWINGS AND SPECIFICATIONS.

Applicable drawings and construction and service contract specifications will be incorporated into each site specific task order.

H-15. ORDER OF PRECEDENCE.

Any inconsistency in this solicitation or contract shall be resolved by giving precedence in the following order: (a) the Schedule (excluding the specifications), (b) representations and other instructions, (c) contract clauses, (d) other documents, exhibits, and attachments, and (e) the specifications.

H-16. EVALUATION OF CONTRACTOR PERFORMANCE.

In accordance with FAR 36.201(a)(1)(i), the Contractor's performance will be evaluated annually before exercise of each option year, and may be evaluated upon completion of each Task Order. Interim evaluations may be prepared at any time during contract performance when determined to be in the best interest of the Government.

H-17. BPA INVOLVEMENT.

By agreement between the department of the Army and the Bonneville Power Administration (BPA) some projects completed under this contract may be funded in whole or in part by the Bonneville Power Administration. For such task orders the contractor is advised that also by agreement between the Army and the BPA, the BPA will be notified of any and all disputes and the BPA will be provided with an opportunity to participate in the dispute litigation and settlement negotiations.

H-18. APPLICABILITY OF DAVIS-BACON ACT.

The Davis-Bacon Wage Rates shall be incorporated into site-specific task orders which are primarily construction in nature.

H-19. SERVICE WAGE DETERMINATIONS.

The Service Contract Act Wage Determination shall be incorporated into site specific task orders which are primarily service in nature.

H-20. EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE (MAR 1995)-
(EFARS 52.231-5000)

(a) This clause does not apply to terminations. See 52.249-5000, Basis for Settlement of Proposals and FAR Part 49.

(b) Allowable cost for construction and marine plant and equipment in sound workable condition owned or controlled and furnished by a contractor or subcontractor at any tier shall be based on actual cost data for each piece of equipment or groups of similar serial and series for which the Government can determine both ownership and operating costs from the contractor's accounting records. When both ownership and operating costs cannot be determined for any piece of equipment or groups of similar serial or series equipment from the contractor's accounting records, costs for that equipment shall be based upon the applicable provisions of EP 1110-1-8, Construction Equipment Ownership and Operating Expense Schedule, Region VIII Oregon, Washington & Idaho and IV Montana } Working conditions shall be considered to be average for determining equipment rates using the schedule unless specified otherwise by the contracting officer. For equipment not included in the schedule, rates for comparable pieces of equipment may be used or a rate may be developed using the formula provided in the schedule. For forward pricing, the schedule in effect at the time of negotiations shall apply. For retroactive pricing, the schedule in effect at the time the work was performed shall apply.

(c) Equipment rental costs are allowable, subject to the provisions of FAR 31.105(d)(ii) and FAR 31.205-36. Rates for equipment rented from an organization under common control, lease-purchase arrangements, and sale-leaseback arrangements, will be determined using the schedule, except that actual rates will be used for equipment leased from an organization under common control that has an established practice of leasing the same or similar equipment to unaffiliated lessees.

(d) When actual equipment costs are proposed and the total amount of the pricing action exceeds the small purchase threshold, the contracting officer shall request the contractor to submit either certified cost or pricing data, or partial/limited data, as appropriate. The data shall be submitted on Standard Form 1411, Contract Pricing Proposal Cover Sheet.

(e) Copies of EP1110-1-8 "Construction Equipment Ownership and Operating Expense Schedule" Volumes 1 through 12 are available in Portable Document Format (PDF) and can be viewed or downloaded at <http://www.usace.army.mil/inet/usace-docs/eng-pamphlets/cecw.htm>. A CD-ROM containing (Volumes 1-12) is available through either the Superintendent of Documents or Government bookstores. For additional information telephone 202-512-2250, or access on the Internet at http://www.access.gpo.gov/su_docs.

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SECTION I Contract Clauses

CLAUSES INCORPORATED BY FULL TEXT

Successor Contracting Officers (52.201-4001)

The Contracting Officer who signed this contract is the primary Contracting Officer for the contract. Nevertheless, any Contracting Officer assigned to the Seattle District and acting within his/her authority may take formal action on this contract when a contract action needs to be taken and the primary Contracting Officer is unavailable.

52.202-1 DEFINITIONS. (OCT 1995)

(a) "Head of the agency" (also called "agency head") or "Secretary" means the Secretary (or Attorney General, Administrator, Governor, Chairperson, or other chief official, as appropriate) of the agency, including any deputy or assistant chief official of the agency, and the term "authorized representative" means any person, persons, or board (other than the Contracting Officer) authorized to act for the head of the agency or Secretary.

(b) Commercial component means any component that is a commercial item.

(c) Commercial item means--

(1) Any item, other than real property, that is of a type customarily used for nongovernmental purposes and that--

(i) Has been sold, leased, or licensed to the general public; or

(ii) Has been offered for sale, lease, or license to the general public;

(2) Any item that evolved from an item described in paragraph (c)(1) of this clause through advances in technology or performance and that is not yet available in the commercial marketplace, but will be available in the commercial marketplace in time to satisfy the delivery requirements under a Government solicitation;

(3) Any item that would satisfy a criterion expressed in paragraphs (c)(1) or (c)(2) of this clause, but for--

(i) Modifications of a type customarily available in the commercial marketplace; or

(ii) Minor modifications of a type not customarily available in the commercial marketplace made to meet Federal Government requirements. "Minor" modifications means modifications that do not significantly alter the nongovernmental function or essential physical characteristics of an item or component, or change the purpose of a process. Factors to be considered in determining whether a modification is minor include the value and size of the modification and the comparative value and size of the final product. Dollar values and percentages may be used as guideposts, but are not conclusive evidence that a modification is minor;

(4) Any combination of items meeting the requirements of paragraphs (c)(1), (2), (3), or (5) of this clause that are of a type customarily combined and sold in combination to the general public;

(5) Installation services, maintenance services, repair services, training services, and other services if such services are procured for support of an item referred to in paragraphs (c)(1), (2), (3), or (4) of this clause, and if the source of such services--

(i) Offers such services to the general public and the Federal Government contemporaneously and under similar terms and conditions; and

(ii) Offers to use the same work force for providing the Federal Government with such services as the source uses for providing such services to the general public;

(6) Services of a type offered and sold competitively in substantial quantities in the commercial marketplace based on established catalog or market prices for specific tasks performed under standard commercial terms and conditions. This does not include services that are sold based on hourly rates without an established catalog or market price for a specific service performed;

(7) Any item, combination of items, or service referred to in subparagraphs (c)(1) through (c)(6), notwithstanding the fact that the item, combination of items, or service is transferred between or among separate divisions, subsidiaries, or affiliates of a Contractor; or

(8) A nondevelopmental item, if the procuring agency determines the item was developed exclusively at private expense and sold in substantial quantities, on a competitive basis, to multiple State and local Governments.

(d) Component means any item supplied to the Federal Government as part of an end item or of another component.

(e) Nondevelopmental item means--

(1) Any previously developed item of supply used exclusively for governmental purposes by a Federal agency, a State or local government, or a foreign government with which the United States has a mutual defense cooperation agreement;

(2) Any item described in paragraph (e)(1) of this definition that requires only minor modification or modifications of a type customarily available in the commercial marketplace in order to meet the requirements of the procuring department or agency; or

(3) Any item of supply being produced that does not meet the requirements of paragraph (e)(1) or (e)(2) solely because the item is not yet in use.

(f) "Contracting Officer" means a person with the authority to enter into, administer, and/or terminate contracts and make related determinations and findings. The term includes certain authorized representatives of the Contracting Officer acting within the limits of their authority as delegated by the Contracting Officer.

(g) Except as otherwise provided in this contract, the term "subcontracts" includes, but is not limited to, purchase orders and changes and modifications to purchase orders under this contract.

52.203-3 GRATUITIES (APR 1984)

(a) The right of the Contractor to proceed may be terminated by written notice if, after notice and hearing, the agency head or a designee determines that the Contractor, its agent, or another representative--

(1) Offered or gave a gratuity (e.g., an entertainment or gift) to an officer, official, or employee of the Government; and

(2) Intended, by the gratuity, to obtain a contract or favorable treatment under a contract.

(b) The facts supporting this determination may be reviewed by any court having lawful jurisdiction.

(c) If this contract is terminated under paragraph (a) of this clause, the Government is entitled--

(1) To pursue the same remedies as in a breach of the contract; and

(2) In addition to any other damages provided by law, to exemplary damages of not less than 3 nor more than 10 times the cost incurred by the Contractor in giving gratuities to the person concerned, as determined by the agency head or a designee. (This subparagraph (c)(2) is applicable only if this contract uses money appropriated to the Department of Defense.)

(d) The rights and remedies of the Government provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

52.203-5 COVENANT AGAINST CONTINGENT FEES (APR 1984)

(a) The Contractor warrants that no person or agency has been employed or retained to solicit or obtain this contract upon an agreement or understanding for a contingent fee, except a bona fide employee or agency. For breach or violation of this warranty, the Government shall have the right to annul this contract without liability or, in its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of the contingent fee.

(b) "Bona fide agency," as used in this clause, means an established commercial or selling agency, maintained by a contractor for the purpose of securing business, that neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds itself out as being able to obtain any Government contract or contracts through improper influence.

"Bona fide employee," as used in this clause, means a person, employed by a contractor and subject to the contractor's supervision and control as to time, place, and manner of performance, who neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds out as being able to obtain any Government contract or contracts through improper influence.

"Contingent fee," as used in this clause, means any commission, percentage, brokerage, or other fee that is contingent upon the success that a person or concern has in securing a Government contract.

"Improper influence," as used in this clause, means any influence that induces or tends to induce a Government employee or officer to give consideration or to act regarding a Government contract on any basis other than the merits of the matter.

(End of clause)

52.203-6 RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT (JUL 1995)

(a) Except as provided in (b) of this clause, the Contractor shall not enter into any agreement with an actual or prospective subcontractor, nor otherwise act in any manner, which has or may have the effect of restricting sales by such subcontractors directly to the Government of any item or process (including computer software) made or furnished by the subcontractor under this contract or under any follow-on production contract.

(b) The prohibition in (a) of this clause does not preclude the Contractor from asserting rights that are otherwise authorized by law or regulation.

(c) The Contractor agrees to incorporate the substance of this clause, including this paragraph (c), in all subcontracts under this contract which exceed \$100,000.

52.203-7 ANTI-KICKBACK PROCEDURES. (JUL 1995)

(a) Definitions.

"Kickback," as used in this clause, means any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided, directly or indirectly, to any prime Contractor, prime Contractor employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contract or in connection with a subcontract relating to a prime contract.

"Person," as used in this clause, means a corporation, partnership, business association of any kind, trust, joint-stock company, or individual.

"Prime contract," as used in this clause, means a contract or contractual action entered into by the United States for the purpose of obtaining supplies, materials, equipment, or services of any kind.

"Prime Contractor," as used in this clause, means a person who has entered into a prime contract with the United States.

"Prime Contractor employee," as used in this clause, means any officer, partner, employee, or agent of a prime Contractor.

"Subcontract," as used in this clause, means a contract or contractual action entered into by a prime Contractor or subcontractor for the purpose of obtaining supplies, materials, equipment, or services of any kind under a prime contract.

"Subcontractor," as used in this clause, (1) means any person, other than the prime Contractor, who offers to furnish or furnishes any supplies, materials, equipment, or services of any kind under a prime contract or a subcontract entered into in connection with such prime contract, and (2) includes any person who offers to furnish or furnishes general supplies to the prime Contractor or a higher tier subcontractor.

"Subcontractor employee," as used in this clause, means any officer, partner, employee, or agent of a subcontractor.

(b) The Anti-Kickback Act of 1986 (41 U.S.C. 51-58) (the Act), prohibits any person from -

(1) Providing or attempting to provide or offering to provide any kickback;

(2) Soliciting, accepting, or attempting to accept any kickback; or

(3) Including, directly or indirectly, the amount of any kickback in the contract price charged by a prime Contractor to the United States or in the contract price charged by a subcontractor to a prime Contractor or higher tier subcontractor.

(c)(1) The Contractor shall have in place and follow reasonable procedures designed to prevent and detect possible violations described in paragraph (b) of this clause in its own operations and direct business relationships.

(2) When the Contractor has reasonable grounds to believe that a violation described in paragraph (b) of this clause may have occurred, the Contractor shall promptly report in writing the possible violation. Such reports shall be made to the inspector general of the contracting agency, the head of the contracting agency if the agency does not have an inspector general, or the Department of Justice.

(3) The Contractor shall cooperate fully with any Federal agency investigating a possible violation described in paragraph (b) of this clause.

(4) The Contracting Officer may (i) offset the amount of the kickback against any monies owed by the United States under the prime contract and/or (ii) direct that the Prime Contractor withhold, from sums owed a subcontractor under the prime contract, the amount of any kickback. The Contracting Officer may order the monies withheld under subdivision (c)(4)(ii) of this clause be paid over to the Government unless the Government has already offset those monies under subdivision (c)(4)(i) of this clause. In either case, the Prime Contractor shall notify the

Contracting Officer when the monies are withheld.

(5) The Contractor agrees to incorporate the substance of this clause, including this subparagraph (c)(5) but excepting subparagraph (c)(1), in all subcontracts under this contract which exceed \$100,000.

52.203-8 CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)

(a) If the Government receives information that a contractor or a person has engaged in conduct constituting a violation of subsection (a), (b), (c), or (d) of Section 27 of the Office of Federal Procurement Policy Act (41 U.S.C. 423) (the Act), as amended by section 4304 of the 1996 National Defense Authorization Act for Fiscal Year 1996 (Pub. L. 104-106), the Government may--

(1) Cancel the solicitation, if the contract has not yet been awarded or issued; or

(2) Rescind the contract with respect to which--

(i) The Contractor or someone acting for the Contractor has been convicted for an offense where the conduct constitutes a violation of subsection 27 (a) or (b) of the Act for the purpose of either--

(A) Exchanging the information covered by such subsections for anything of value; or

(B) Obtaining or giving anyone a competitive advantage in the award of a Federal agency procurement contract; or

(ii) The head of the contracting activity has determined, based upon a preponderance of the evidence, that the Contractor or someone acting for the Contractor has engaged in conduct constituting an offense punishable under subsections 27(e)(1) of the Act.

(b) If the Government rescinds the contract under paragraph (a) of this clause, the Government is entitled to recover, in addition to any penalty prescribed by law, the amount expended under the contract.

(c) The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law, regulation, or under this contract.

52.203-10 PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)

(a) The Government, at its election, may reduce the price of a fixed-price type contract and the total cost and fee under a cost-type contract by the amount of profit or fee determined as set forth in paragraph (b) of this clause if the head of the contracting activity or designee determines that there was a violation of subsection 27 (a), (b), or (c) of the Office of Federal Procurement Policy Act, as amended (41 U.S.C. 423), as implemented in section 3.104 of the Federal Acquisition Regulation.

(b) The price or fee reduction referred to in paragraph (a) of this clause shall be--

(1) For cost-plus-fixed-fee contracts, the amount of the fee specified in the contract at the time of award;

(2) For cost-plus-incentive-fee contracts, the target fee specified in the contract at the time of award, notwithstanding any minimum fee or "fee floor" specified in the contract;

(3) For cost-plus-award-fee contracts--

- (i) The base fee established in the contract at the time of contract award;
 - (ii) If no base fee is specified in the contract, 30 percent of the amount of each award fee otherwise payable to the Contractor for each award fee evaluation period or at each award fee determination point.
- (4) For fixed-price-incentive contracts, the Government may--
- (i) Reduce the contract target price and contract target profit both by an amount equal to the initial target profit specified in the contract at the time of contract award; or
 - (ii) If an immediate adjustment to the contract target price and contract target profit would have a significant adverse impact on the incentive price revision relationship under the contract, or adversely affect the contract financing provisions, the Contracting Officer may defer such adjustment until establishment of the total final price of the contract. The total final price established in accordance with the incentive price revision provisions of the contract shall be reduced by an amount equal to the initial target profit specified in the contract at the time of contract award and such reduced price shall be the total final contract price.
- (5) For firm-fixed-price contracts, by 10 percent of the initial contract price or a profit amount determined by the Contracting Officer from records or documents in existence prior to the date of the contract award.
- (c) The Government may, at its election, reduce a prime contractor's price or fee in accordance with the procedures of paragraph (b) of this clause for violations of the Act by its subcontractors by an amount not to exceed the amount of profit or fee reflected in the subcontract at the time the subcontract was first definitively priced.
- (d) In addition to the remedies in paragraphs (a) and (c) of this clause, the Government may terminate this contract for default. The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

52.203-12 LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (JUN 1997)

(a) Definitions.

"Agency," as used in this clause, means executive agency as defined in 2.101.

"Covered Federal action," as used in this clause, means any of the following Federal actions:

- (1) The awarding of any Federal contract.
- (2) The making of any Federal grant.
- (3) The making of any Federal loan.
- (4) The entering into of any cooperative agreement.
- (5) The extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

"Indian tribe" and "tribal organization," as used in this clause, have the meaning provided in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450B) and include Alaskan Natives.

"Influencing or attempting to influence," as used in this clause, means making, with the intent to influence, any communication to or appearance before an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any covered Federal action.

"Local government," as used in this clause, means a unit of government in a State and, if chartered, established, or otherwise recognized by a State for the performance of a governmental duty, including a local public authority, a special district, an intrastate district, a council of governments, a sponsor group representative organization, and any other instrumentality of a local government.

"Officer or employee of an agency," as used in this clause, includes the following individuals who are employed by an agency:

- (1) An individual who is appointed to a position in the Government under title 5, United States Code, including a position under a temporary appointment.
- (2) A member of the uniformed services, as defined in subsection 101(3), title 37, United States Code.
- (3) A special Government employee, as defined in section 202, title 18, United States Code.
- (4) An individual who is a member of a Federal advisory committee, as defined by the Federal Advisory Committee Act, title 5, United States Code, appendix 2.

"Person," as used in this clause, means an individual, corporation, company, association, authority, firm, partnership, society, State, and local government, regardless of whether such entity is operated for profit, or not for profit. This term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law.

"Reasonable compensation," as used in this clause, means, with respect to a regularly employed officer or employee of any person, compensation that is consistent with the normal compensation for such officer or employee for work that is not furnished to, not funded by, or not furnished in cooperation with the Federal Government.

"Reasonable payment," as used in this clause, means, with respect to professional and other technical services, a payment in an amount that is consistent with the amount normally paid for such services in the private sector.

"Recipient," as used in this clause, includes the Contractor and all subcontractors. This term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law.

"Regularly employed," as used in this clause, means, with respect to an officer or employee of a person requesting or receiving a Federal contract, an officer or employee who is employed by such person for at least 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person for receipt of such contract. An officer or employee who is employed by such person for less than 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person shall be considered to be regularly employed as soon as he or she is employed by such person for 130 working days.

"State," as used in this clause, means a State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, a territory or possession of the United States, an agency or instrumentality of a State, and multi-State, regional, or interstate entity having governmental duties and powers.

(b) Prohibitions.

- (1) Section 1352 of title 31, United States Code, among other things, prohibits a recipient of a Federal contract, grant, loan, or cooperative agreement from using appropriated funds to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an

employee of a Member of Congress in connection with any of the following covered Federal actions: the awarding of any Federal contract; the making of any Federal grant; the making of any Federal loan; the entering into of any cooperative agreement; or the modification of any Federal contract, grant, loan, or cooperative agreement.

(2) The Act also requires Contractors to furnish a disclosure if any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a Federal contract, grant, loan, or cooperative agreement.

(3) The prohibitions of the Act do not apply under the following conditions:

(i) Agency and legislative liaison by own employees.

(A) The prohibition on the use of appropriated funds, in subparagraph (b)(1) of this clause, does not apply in the case of a payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action if the payment is for agency and legislative liaison activities not directly related to a covered Federal action.

(B) For purposes of subdivision (b)(3)(i)(A) of this clause, providing any information specifically requested by an agency or Congress is permitted at any time.

(C) The following agency and legislative liaison activities are permitted at any time where they are not related to a specific solicitation for any covered Federal action:

(1) Discussing with an agency the qualities and characteristics (including individual demonstrations) of the person's products or services, conditions or terms of sale, and service capabilities.

(2) Technical discussions and other activities regarding the application or adaptation of the person's products or services for an agency's use.

(D) The following agency and legislative liaison activities are permitted where they are prior to formal solicitation of any covered Federal action--

(1) Providing any information not specifically requested but necessary for an agency to make an informed decision about initiation of a covered Federal action;

(2) Technical discussions regarding the preparation of an unsolicited proposal prior to its official submission; and

(3) Capability presentations by persons seeking awards from an agency pursuant to the provisions of the Small Business Act, as amended by Pub. L. 95-507, and subsequent amendments.

(E) Only those services expressly authorized by subdivision (b)(3)(i)(A) of this clause are permitted under this clause.

(ii) Professional and technical services.

(A) The prohibition on the use of appropriated funds, in subparagraph (b)(1) of this clause, does not apply in the case of--

(1) A payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action, if payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action.

(2) Any reasonable payment to a person, other than an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action if the payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action. Persons other than officers or employees of a person requesting or receiving a covered Federal action include consultants and trade associations.

(B) For purposes of subdivision (b)(3)(ii)(A) of this clause, "professional and technical services" shall be limited to advice and analysis directly applying any professional or technical discipline. For example, drafting of a legal document accompanying a bid or proposal by a lawyer is allowable. Similarly, technical advice provided by an engineer on the performance or operational capability of a piece of equipment rendered directly in the negotiation of a contract is allowable. However, communications with the intent to influence made by a professional (such as a licensed lawyer) or a technical person (such as a licensed accountant) are not allowable under this section unless they provide advice and analysis directly applying their professional or technical expertise and unless the advice or analysis is rendered directly and solely in the preparation, submission or negotiation of a covered Federal action. Thus, for example, communications with the intent to influence made by a lawyer that do not provide legal advice or analysis directly and solely related to the legal aspects of his or her client's proposal, but generally advocate one proposal over another are not allowable under this section because the lawyer is not providing professional legal services. Similarly, communications with the intent to influence made by an engineer providing an engineering analysis prior to the preparation or submission of a bid or proposal are not allowable under this section since the engineer is providing technical services but not directly in the preparation, submission or negotiation of a covered Federal action.

(C) Requirements imposed by or pursuant to law as a condition for receiving a covered Federal award include those required by law or regulation and any other requirements in the actual award documents.

(D) Only those services expressly authorized by subdivisions (b)(3)(ii)(A)(1) and (2) of this clause are permitted under this clause.

(E) The reporting requirements of FAR 3.803(a) shall not apply with respect to payments of reasonable compensation made to regularly employed officers or employees of a person.

(c) Disclosure.

(1) The Contractor who requests or receives from an agency a Federal contract shall file with that agency a disclosure form, OMB standard form LLL, Disclosure of Lobbying Activities, if such person has made or has agreed to make any payment using nonappropriated funds (to include profits from any covered Federal action), which would be prohibited under subparagraph (b)(1) of this clause, if paid for with appropriated funds.

(2) The Contractor shall file a disclosure form at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the information contained in any disclosure form previously filed by such person under subparagraph (c)(1) of this clause. An event that materially affects the accuracy of the information reported includes--

(i) A cumulative increase of \$25,000 or more in the amount paid or expected to be paid for influencing or attempting to influence a covered Federal action; or

(ii) A change in the person(s) or individual(s) influencing or attempting to influence a covered Federal action; or

(iii) A change in the officer(s), employee(s), or Member(s) contacted to influence or attempt to influence a covered Federal action.

(3) The Contractor shall require the submittal of a certification, and if required, a disclosure form by any person who requests or receives any subcontract exceeding \$100,000 under the Federal contract.

(4) All subcontractor disclosure forms (but not certifications) shall be forwarded from tier to tier until received by the prime Contractor. The prime Contractor shall submit all disclosures to the Contracting Officer at the end of the calendar quarter in which the disclosure form is submitted by the subcontractor. Each subcontractor certification shall be retained in the subcontract file of the awarding Contractor.

(d) Agreement. The Contractor agrees not to make any payment prohibited by this clause.

(e) Penalties.

(1) Any person who makes an expenditure prohibited under paragraph (a) of this clause or who fails to file or amend the disclosure form to be filed or amended by paragraph (b) of this clause shall be subject to civil penalties as provided for by 31 U.S.C. 1352. An imposition of a civil penalty does not prevent the Government from seeking any other remedy that may be applicable.

(2) Contractors may rely without liability on the representation made by their subcontractors in the certification and disclosure form.

(f) Cost allowability. Nothing in this clause makes allowable or reasonable any costs which would otherwise be unallowable or unreasonable. Conversely, costs made specifically unallowable by the requirements in this clause will not be made allowable under any other provision.

(End of clause)

52.204-4 PRINTING/COPYING DOUBLE-SIDED ON RECYCLED PAPER (AUG 2000)

(a) Definitions. As used in this clause--

Postconsumer material means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Postconsumer material is a part of the broader category of "recovered material." For paper and paper products, postconsumer material means "postconsumer fiber" defined by the U.S. Environmental Protection Agency (EPA) as--

(1) Paper, paperboard, and fibrous materials from retail stores, office buildings, homes, and so forth, after they have passed through their end-usage as a consumer item, including: used corrugated boxes; old newspapers; old magazines; mixed waste paper; tabulating cards; and used cordage; or

(2) All paper, paperboard, and fibrous materials that enter and are collected from municipal solid waste; but not

(3) Fiber derived from printers' over-runs, converters' scrap, and over-issue publications.

Printed or copied double-sided means printing or reproducing a document so that information is on both sides of a sheet of paper.

Recovered material, for paper and paper products, is defined by EPA in its Comprehensive Procurement Guideline as "recovered fiber" and means the following materials:

(1) Postconsumer fiber; and

(2) Manufacturing wastes such as--

(i) Dry paper and paperboard waste generated after completion of the papermaking process (that is, those manufacturing operations up to and including the cutting and trimming of the paper machine reel into smaller rolls or rough sheets) including: envelope cuttings, bindery trimmings, and other paper and paperboard waste resulting

from printing, cutting, forming, and other converting operations; bag, box, and carton manufacturing wastes; and butt rolls, mill wrappers, and rejected unused stock; and

(ii) Repulped finished paper and paperboard from obsolete inventories of paper and paperboard manufacturers, merchants, wholesalers, dealers, printers, converters, or others.

(b) In accordance with Section 101 of Executive Order 13101 of September 14, 1998, Greening the Government through Waste Prevention, Recycling, and Federal Acquisition, the Contractor is encouraged to submit paper documents, such as offers, letters, or reports, that are printed or copied double-sided on recycled paper that meet minimum content standards specified in Section 505 of Executive Order 13101, when not using electronic commerce methods to submit information or data to the Government.

(c) If the Contractor cannot purchase high-speed copier paper, offset paper, forms bond, computer printout paper, carbonless paper, file folders, white wove envelopes, writing and office paper, book paper, cotton fiber paper, and cover stock meeting the 30 percent postconsumer material standard for use in submitting paper documents to the Government, it should use paper containing no less than 20 percent postconsumer material. This lesser standard should be used only when paper meeting the 30 percent postconsumer material standard is not obtainable at a reasonable price or does not meet reasonable performance standards.

(End of clause)

52.209-6 PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT (JUL 1995)

(a) The Government suspends or debar Contractors to protect the Government's interests. The Contractor shall not enter into any subcontract in excess of the \$25,000 with a Contractor that is debarred, suspended, or proposed for debarment unless there is a compelling reason to do so.

(b) The Contractor shall require each proposed first-tier subcontractor, whose subcontract will exceed \$25,000, to disclose to the Contractor, in writing, whether as of the time of award of the subcontract, the subcontractor, or its principles, is or is not debarred, suspended, or proposed for debarment by the Federal Government.

(c) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party that is debarred, suspended, or proposed for debarment (see FAR 9.404 for information on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs). The notice must include the following:

(1) The name of the subcontractor.

(2) The Contractor's knowledge of the reasons for the subcontractor being on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs.

(3) The compelling reason(s) for doing business with the subcontractor notwithstanding its inclusion on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs.

(4) The systems and procedures the Contractor has established to ensure that it is fully protecting the Government's interests when dealing with such subcontractor in view of the specific basis for the party's debarment, suspension, or proposed debarment.

(End of clause)

52.211-18 VARIATION IN ESTIMATED QUANTITY (APR 1984)

If the quantity of a unit-priced item in this contract is an estimated quantity and the actual quantity of the unit-priced

item varies more than 15 percent above or below the estimated quantity, an equitable adjustment in the contract price shall be made upon demand of either party. The equitable adjustment shall be based upon any increase or decrease in costs due solely to the variation above 115 percent or below 85 percent of the estimated quantity. If the quantity variation is such as to cause an increase in the time necessary for completion, the Contractor may request, in writing, an extension of time, to be received by the Contracting Officer within 10 days from the beginning of the delay, or within such further period as may be granted by the Contracting Officer before the date of final settlement of the contract. Upon the receipt of a written request for an extension, the Contracting Officer shall ascertain the facts and make an adjustment for extending the completion date as, in the judgement of the Contracting Officer, is justified.

52.215-2 AUDIT AND RECORDS--NEGOTIATION (JUN 1999)

(a) As used in this clause, "records" includes books, documents, accounting procedures and practices, and other data, regardless of type and regardless of whether such items are in written form, in the form of computer data, or in any other form.

(b) Examination of costs. If this is a cost-reimbursement, incentive, time-and-materials, labor-hour, or price redeterminable contract, or any combination of these, the Contractor shall maintain and the Contracting Officer, or an authorized representative of the Contracting Officer, shall have the right to examine and audit all records and other evidence sufficient to reflect properly all costs claimed to have been incurred or anticipated to be incurred directly or indirectly in performance of this contract. This right of examination shall include inspection at all reasonable times of the Contractor's plants, or parts of them, engaged in performing the contract.

(c) Cost or pricing data. If the Contractor has been required to submit cost or pricing data in connection with any pricing action relating to this contract, the Contracting Officer, or an authorized representative of the Contracting Officer, in order to evaluate the accuracy, completeness, and currency of the cost or pricing data, shall have the right to examine and audit all of the Contractor's records, including computations and projections, related to--

(1) The proposal for the contract, subcontract, or modification;

(2) The discussions conducted on the proposal(s), including those related to negotiating;

(3) Pricing of the contract, subcontract, or modification; or

(4) Performance of the contract, subcontract or modification.

(d) Comptroller General--(1) The Comptroller General of the United States, or an authorized representative, shall have access to and the right to examine any of the Contractor's directly pertinent records involving transactions related to this contract or a subcontract hereunder.

(2) This paragraph may not be construed to require the Contractor or subcontractor to create or maintain any record that the Contractor or subcontractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(e) Reports. If the Contractor is required to furnish cost, funding, or performance reports, the Contracting Officer or an authorized representative of the Contracting Officer shall have the right to examine and audit the supporting records and materials, for the purpose of evaluating (1) the effectiveness of the Contractor's policies and procedures to produce data compatible with the objectives of these reports and (2) the data reported.

(f) Availability. The Contractor shall make available at its office at all reasonable times the records, materials, and other evidence described in paragraphs (a), (b), (c), (d), and (e) of this clause, for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in Subpart 4.7, Contractor Records Retention, of the Federal Acquisition Regulation (FAR), or for any longer period required by statute or by other clauses of this contract. In addition--

(1) If this contract is completely or partially terminated, the Contractor shall make available the records relating to the work terminated until 3 years after any resulting final termination settlement; and

(2) The Contractor shall make available records relating to appeals under the Disputes clause or to litigation or the settlement of claims arising under or relating to this contract until such appeals, litigation, or claims are finally resolved.

(g) The Contractor shall insert a clause containing all the terms of this clause, including this paragraph (g), in all subcontracts under this contract that exceed the simplified acquisition threshold, and--

(1) That are cost-reimbursement, incentive, time-and-materials, labor-hour, or price-redeterminable type or any combination of these;

(2) For which cost or pricing data are required; or

(3) That require the subcontractor to furnish reports as discussed in paragraph (e) of this clause.

The clause may be altered only as necessary to identify properly the contracting parties and the Contracting Officer under the Government prime contract.

(End of clause)

52.215-11 PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA--MODIFICATIONS (OCT 1997)

(a) This clause shall become operative only for any modification to this contract involving a pricing adjustment expected to exceed the threshold for submission of cost or pricing data at FAR 15.403-4, except that this clause does not apply to any modification if an exception under FAR 15.403-1 applies.

(b) If any price, including profit or fee, negotiated in connection with any modification under this clause, or any cost reimbursable under this contract, was increased by any significant amount because (1) the Contractor or a subcontractor furnished cost or pricing data that were not complete, accurate, and current as certified in its Certificate of Current Cost or Pricing Data, (2) a subcontractor or prospective subcontractor furnished the Contractor cost or pricing data that were not complete, accurate, and current as certified in the Contractor's Certificate of Current Cost or Pricing Data, or (3) any of these parties furnished data of any description that were not accurate, the price or cost shall be reduced accordingly and the contract shall be modified to reflect the reduction. This right to a price reduction is limited to that resulting from defects in data relating to modifications for which this clause becomes operative under paragraph (a) of this clause.

(c) Any reduction in the contract price under paragraph (b) of this clause due to defective data from a prospective subcontractor that was not subsequently awarded the subcontract shall be limited to the amount, plus applicable overhead and profit markup, by which--

(1) The actual subcontract; or

(2) The actual cost to the Contractor, if there was no subcontract, was less than the prospective subcontract cost estimate submitted by the Contractor; provided, that the actual subcontract price was not itself affected by defective cost or pricing data.

(d)(1) If the Contracting Officer determines under paragraph (b) of this clause that a price or cost reduction should be made, the Contractor agrees not to raise the following matters as a defense:

(i) The Contractor or subcontractor was a sole source supplier or otherwise was in a superior bargaining position and thus the price of the contract would not have been modified even if accurate, complete, and current cost or pricing data had been submitted.

(ii) The Contracting Officer should have known that the cost or pricing data in issue were defective even though the Contractor or subcontractor took no affirmative action to bring the character of the data to the attention of the Contracting Officer.

(iii) The contract was based on an agreement about the total cost of the contract and there was no agreement about the cost of each item procured under the contract.

(iv) The Contractor or subcontractor did not submit a Certificate of Current Cost or Pricing Data.

(2)(i) Except as prohibited by subdivision (d)(2)(ii) of this clause, an offset in an amount determined appropriate by the Contracting Officer based upon the facts shall be allowed against the amount of a contract price reduction if--

(A) The Contractor certifies to the Contracting Officer that, to the best of the Contractor's knowledge and belief, the Contractor is entitled to the offset in the amount requested; and

(B) The Contractor proves that the cost or pricing data were available before the "as of" date specified on its Certificate of Current Cost or Pricing Data, and that the data were not submitted before such date.

(ii) An offset shall not be allowed if--

(A) The understated data were known by the Contractor to be understated before the "as of" date specified on its Certificate of Current Cost or Pricing Data; or

(B) The Government proves that the facts demonstrate that the contract price would not have increased in the amount to be offset even if the available data had been submitted before the "as of" date specified on its Certificate of Current Cost or Pricing Data.

(e) If any reduction in the contract price under this clause reduces the price of items for which payment was made prior to the date of the modification reflecting the price reduction, the Contractor shall be liable to and shall pay the United States at the time such overpayment is repaid--

(1) Simple interest on the amount of such overpayment to be computed from the date(s) of overpayment to the Contractor to the date the Government is repaid by the Contractor at the applicable underpayment rate effective for each quarter prescribed by the Secretary of the Treasury under 26 U.S.C. 6621(a)(2); and

A penalty equal to the amount of the overpayment, if the Contractor or subcontractor knowingly submitted cost or pricing data that were incomplete, inaccurate, or noncurrent.

52.215-15 PENSION ADJUSTMENTS AND ASSET REVERSIONS (DEC 1998)

(a) The Contractor shall promptly notify the Contracting Officer in writing when it determines that it will terminate a defined-benefit pension plan or otherwise recapture such pension fund assets.

(b) For segment closings, pension plan terminations, or curtailment of benefits, the adjustment amount shall be the amount measured, assigned, and allocated in accordance with 48 CFR 9904.413-50(c)(12) for contracts and subcontracts that are subject to Cost Accounting Standards (CAS) Board rules and regulations (48 CFR Chapter 99). For contracts and subcontracts that are not subject to CAS, the adjustment amount shall be the amount measured, assigned, and allocated in accordance with 48 CFR 9904.413-50(c)(12), except the numerator of the fraction at 48 CFR 9904.413-50(c)(12)(vi) shall be the sum of the pension plan costs allocated to all non-CAS-covered contracts and subcontracts that are subject to Federal Acquisition Regulation (FAR) Subpart 31.2 or for which cost or pricing data were submitted.

(c) For all other situations where assets revert to the Contractor, or such assets are constructively received by it for any reason, the Contractor shall, at the Government's option, make a refund or give a credit to the Government for its equitable share of the gross amount withdrawn. The Government's equitable share shall reflect the Government's participation in pension costs through those contracts for which cost or pricing data were submitted or that are subject to FAR Subpart 31.2.

(d) The Contractor shall include the substance of this clause in all subcontracts under this contract that meet the applicability requirement of FAR 15.408(g).

(End of clause)

52.215-18 REVERSION OR ADJUSTMENT OF PLANS FOR POSTRETIREMENT BENEFITS (PRB) OTHER THAN PENSIONS (OCT 1997)

The Contractor shall promptly notify the Contracting Officer in writing when it determines that it will terminate or reduce a PRB plan. If PRB fund assets revert, or inure, to the Contractor or are constructively received by it under a plan termination or otherwise, the Contractor shall make a refund or give a credit to the Government for its equitable share as required by FAR 31.205-6(o)(6). The Contractor shall include the substance of this clause in all subcontracts under this contract that meet the applicability requirements of FAR 15.408(j).

(End of clause)

52.215-19 NOTIFICATION OF OWNERSHIP CHANGES (OCT 1997)

(a) The Contractor shall make the following notifications in writing:

(1) When the Contractor becomes aware that a change in its ownership has occurred, or is certain to occur, that could result in changes in the valuation of its capitalized assets in the accounting records, the Contractor shall notify the Administrative Contracting Officer (ACO) within 30 days.

(2) The Contractor shall also notify the ACO within 30 days whenever changes to asset valuations or any other cost changes have occurred or are certain to occur as a result of a change in ownership.

(b) The Contractor shall--

(1) Maintain current, accurate, and complete inventory records of assets and their costs;

(2) Provide the ACO or designated representative ready access to the records upon request;

(3) Ensure that all individual and grouped assets, their capitalized values, accumulated depreciation or amortization, and remaining useful lives are identified accurately before and after each of the Contractor's ownership changes; and

(4) Retain and continue to maintain depreciation and amortization schedules based on the asset records maintained before each Contractor ownership change.

The Contractor shall include the substance of this clause in all subcontracts under this contract that meet the applicability requirement of FAR 15.408(k).

(End of clause)

52.215-21 REQUIREMENTS FOR COST OR PRICING DATA OR INFORMATION OTHER THAN COST OR PRICING DATA--MODIFICATIONS (OCT 1997)

(a) Exceptions from cost or pricing data. (1) In lieu of submitting cost or pricing data for modifications under this

contract, for price adjustments expected to exceed the threshold set forth at FAR 15.403-4 on the date of the agreement on price or the date of the award, whichever is later, the Contractor may submit a written request for exception by submitting the information described in the following subparagraphs. The Contracting Officer may require additional supporting information, but only to the extent necessary to determine whether an exception should be granted, and whether the price is fair and reasonable--

(i) Identification of the law or regulation establishing the price offered. If the price is controlled under law by periodic rulings, reviews, or similar actions of a governmental body, attach a copy of the controlling document, unless it was previously submitted to the contracting office.

(ii) Information on modifications of contracts or subcontracts for commercial items. (A) If--

(1) The original contract or subcontract was granted an exception from cost or pricing data requirements because the price agreed upon was based on adequate price competition or prices set by law or regulation, or was a contract or subcontract for the acquisition of a commercial item; and

(2) The modification (to the contract or subcontract) is not exempted based on one of these exceptions, then the Contractor may provide information to establish that the modification would not change the contract or subcontract from a contract or subcontract for the acquisition of a commercial item to a contract or subcontract for the acquisition of an item other than a commercial item.

(B) For a commercial item exception, the Contractor shall provide, at a minimum, information on prices at which the same item or similar items have previously been sold that is adequate for evaluating the reasonableness of the price of the modification. Such information may include--

(1) For catalog items, a copy of or identification of the catalog and its date, or the appropriate pages for the offered items, or a statement that the catalog is on file in the buying office to which the proposal is being submitted. Provide a copy or describe current discount policies and price lists (published or unpublished), e.g., wholesale, original equipment manufacturer, or reseller. Also explain the basis of each offered price and its relationship to the established catalog price, including how the proposed price relates to the price of recent sales in quantities similar to the proposed quantities.

(2) For market-priced items, the source and date or period of the market quotation or other basis for market price, the base amount, and applicable discounts. In addition, describe the nature of the market.

(3) For items included on an active Federal Supply Service Multiple Award Schedule contract, proof that an exception has been granted for the schedule item.

(2) The Contractor grants the Contracting Officer or an authorized representative the right to examine, at any time before award, books, records, documents, or other directly pertinent records to verify any request for an exception under this clause, and the reasonableness of price. For items priced using catalog or market prices, or law or regulation, access does not extend to cost or profit information or other data relevant solely to the Contractor's determination of the prices to be offered in the catalog or marketplace.

(b) Requirements for cost or pricing data. If the Contractor is not granted an exception from the requirement to submit cost or pricing data, the following applies:

(1) The Contractor shall submit cost or pricing data and supporting attachments in accordance with Table 15-2 of FAR 15.408.

As soon as practicable after agreement on price, but before award (except for unpriced actions), the Contractor shall submit a Certificate of Current Cost or Pricing Data, as prescribed by FAR 15.406-2.

52.216-22 INDEFINITE QUANTITY. (OCT 1995)

(a) This is an indefinite-quantity contract for the supplies or services specified, and effective for the period stated, in the Schedule. The quantities of supplies and services specified in the Schedule are estimates only and are not purchased by this contract.

(b) Delivery or performance shall be made only as authorized by orders issued in accordance with the Ordering clause. The Contractor shall furnish to the Government, when and if ordered, the supplies or services specified in the Schedule up to and including the quantity designated in the Schedule as the "maximum". The Government shall order at least the quantity of supplies or services designated in the Schedule as the "minimum".

(c) Except for any limitations on quantities in the Order Limitations clause or in the Schedule, there is no limit on the number of orders that may be issued. The Government may issue orders requiring delivery to multiple destinations or performance at multiple locations.

(d) Any order issued during the effective period of this contract and not completed within that period shall be completed by the Contractor within the time specified in the order. The contract shall govern the Contractor's and Government's rights and obligations with respect to that order to the same extent as if the order were completed during the contract's effective period; provided, that the Contractor shall not be required to make any deliveries under this contract after **expiration of the contract**

(End of clause)

6052.217-9 OPTION TO EXTEND THE TERM OF THE CONTRACT (MAR 2000)

(a) The Government may extend the term of this contract by written notice to the Contractor within (insert the period of time within which the Contracting Officer may exercise the option); provided that the Government gives the Contractor a preliminary written notice of its intent to extend at least 60 days (60 days unless a different number of days is inserted) before the contract expires. The preliminary notice does not commit the Government to an extension.

(b) If the Government exercises this option, the extended contract shall be considered to include this option clause.

(c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed **5 years from date of award.**

(End of clause)

52.219-8 UTILIZATION OF SMALL BUSINESS CONCERNS (OCT 2000)

(a) It is the policy of the United States that small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns shall have the maximum practicable opportunity to participate in performing contracts let by any Federal agency, including contracts and subcontracts for subsystems, assemblies, components, and related services for major systems. It is further the policy of the United States that its prime contractors establish procedures to ensure the timely payment of amounts due pursuant to the terms of their subcontracts with small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns.

(b) The Contractor hereby agrees to carry out this policy in the awarding of subcontracts to the fullest extent consistent with efficient contract performance. The Contractor further agrees to cooperate in any studies or surveys as may be conducted by the United States Small Business Administration or the awarding agency of the United States as may be necessary to determine the extent of the Contractor's compliance with this clause.

Definitions. As used in this contract--

HUBZone small business concern means a small business concern that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration.

Service-disabled veteran-owned small business concern--

(1) Means a small business concern--

(i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

(2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

Small business concern means a small business as defined pursuant to Section 3 of the Small Business Act and relevant regulations promulgated pursuant thereto.

Small disadvantaged business concern means a small business concern that represents, as part of its offer that--

(1) It has received certification as a small disadvantaged business concern consistent with 13 CFR part 124, subpart B;

(2) No material change in disadvantaged ownership and control has occurred since its certification;

(3) Where the concern is owned by one or more individuals, the net worth of each individual upon whom the certification is based does not exceed \$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); and

(4) It is identified, on the date of its representation, as a certified small disadvantaged business in the database maintained by the Small Business Administration (PRO-Net).

Veteran-owned small business concern means a small business concern--

(1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and

(2) The management and daily business operations of which are controlled by one or more veterans.

Women-owned small business concern means a small business concern--

(1) That is at least 51 percent owned by one or more women, or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.

(d) Contractors acting in good faith may rely on written representations by their subcontractors regarding their status as a small business concern, a veteran-owned small business concern, a service-disabled veteran-owned small business concern, a HUBZone small business concern, a small disadvantaged business concern, or a women-owned small business concern.

(End of clause)

52.219-9 SMALL BUSINESS SUBCONTRACTING PLAN (OCT 2000) ALTERNATE II (OCT 2000)

(a) This clause does not apply to small business concerns.

(b) Definitions. As used in this clause--

Commercial item means a product or service that satisfies the definition of commercial item in section 2.101 of the Federal Acquisition Regulation.

Commercial plan means a subcontracting plan (including goals) that covers the offeror's fiscal year and that applies to the entire production of commercial items sold by either the entire company or a portion thereof (e.g., division, plant, or product line).

Individual contract plan means a subcontracting plan that covers the entire contract period (including option periods), applies to a specific contract, and has goals that are based on the offeror's planned subcontracting in support of the specific contract, except that indirect costs incurred for common or joint purposes may be allocated on a prorated basis to the contract.

Master plan means a subcontracting plan that contains all the required elements of an individual contract plan, except goals, and may be incorporated into individual contract plans, provided the master plan has been approved.

Subcontract means any agreement (other than one involving an employer-employee relationship) entered into by a Federal Government prime Contractor or subcontractor calling for supplies or services required for performance of the contract or subcontract.

(c) Proposals submitted in response to this solicitation shall include a subcontracting plan that separately addresses subcontracting with small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns. If the offeror is submitting an individual contract plan, the plan must separately address subcontracting with small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns, with a separate part for the basic contract and separate parts for each option (if any). The plan shall be included in and made a part of the resultant contract. The subcontracting plan shall be negotiated within the time specified by the Contracting Officer. Failure to submit and negotiate a subcontracting plan shall make the offeror ineligible for award of a contract.

(d) The offeror's subcontracting plan shall include the following:

(1) Goals, expressed in terms of percentages of total planned subcontracting dollars, for the use of small business, veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns as subcontractors. Service-disabled veteran-owned small business concerns meet the definition of veteran-owned small business concerns, and offerors may include them within the subcontracting plan goal for veteran-owned small business concerns. A separate goal for service-disabled veteran-owned small business concerns is not required. The offeror shall include all subcontracts that contribute to contract performance, and may include a proportionate share of products and services that are normally allocated as indirect costs.

(2) A statement of--

(i) Total dollars planned to be subcontracted for an individual contract plan; or the offeror's total projected sales, expressed in dollars, and the total value of projected subcontracts to support the sales for a commercial plan;

(ii) Total dollars planned to be subcontracted to small business concerns;

(iii) Total dollars planned to be subcontracted to veteran-owned small business concerns;

- (iv) Total dollars planned to be subcontracted to HUBZone small business concerns;
 - (v) Total dollars planned to be subcontracted to small disadvantaged business concerns; and
 - (vi) Total dollars planned to be subcontracted to women-owned small business concerns.
- (3) A description of the principal types of supplies and services to be subcontracted, and an identification of the types planned for subcontracting to--
- (i) Small business concerns;
 - (ii) Veteran-owned small business concerns;
 - (iii) HUBZone small business concerns;
 - (iv) Small disadvantaged business concerns; and
 - (v) Women-owned small business concerns.
- (4) A description of the method used to develop the subcontracting goals in paragraph (d)(1) of this clause.
- (5) A description of the method used to identify potential sources for solicitation purposes (e.g., existing company source lists, the Procurement Marketing and Access Network (PRO-Net) of the Small Business Administration (SBA), veterans service organizations, the National Minority Purchasing Council Vendor Information Service, the Research and Information Division of the Minority Business Development Agency in the Department of Commerce, or small, HUBZone, small disadvantaged, and women-owned small business trade associations). A firm may rely on the information contained in PRO-Net as an accurate representation of a concern's size and ownership characteristics for the purposes of maintaining a small, veteran-owned small, HUBZone small, small disadvantaged, and women-owned small business source list. Use of PRO-Net as its source list does not relieve a firm of its responsibilities (e.g., outreach, assistance, counseling, or publicizing subcontracting opportunities) in this clause.
- (6) A statement as to whether or not the offeror included indirect costs in establishing subcontracting goals, and a description of the method used to determine the proportionate share of indirect costs to be incurred with—
- (i) Small business concerns;
 - (ii) Veteran-owned small business concerns;
 - (iii) HUBZone small business concerns;
 - (iv) Small disadvantaged business concerns; and
 - (v) Women-owned small business concerns.
- (7) The name of the individual employed by the offeror who will administer the offeror's subcontracting program, and a description of the duties of the individual.
- (8) A description of the efforts the offeror will make to assure that small business, veteran-owned small business, HUBZone small business, small disadvantaged business and women-owned small business concerns have an equitable opportunity to compete for subcontracts.
- (9) Assurances that the offeror will include the clause of this contract entitled "Utilization of Small Business Concerns" in all subcontracts that offer further subcontracting opportunities, and that the offeror will require all

subcontractors (except small business concerns) that receive subcontracts in excess of \$500,000 (\$1,000,000 for construction of any public facility) to adopt a subcontracting plan that complies with the requirements of this clause.

(10) Assurances that the offeror will--

(i) Cooperate in any studies or surveys as may be required;

(ii) Submit periodic reports so that the Government can determine the extent of compliance by the offeror with the subcontracting plan;

(iii) Submit Standard Form (SF) 294, Subcontracting Report for Individual Contracts, and/or SF 295, Summary Subcontract Report, in accordance with paragraph (j) of this clause. The reports shall provide information on subcontract awards to small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, small disadvantaged business concerns, women-owned small business concerns, and Historically Black Colleges and Universities and Minority Institutions. Reporting shall be in accordance with the instructions on the forms or as provided in agency regulations.

(iv) Ensure that its subcontractors agree to submit SF 294 and SF 295.

(11) A description of the types of records that will be maintained concerning procedures that have been adopted to comply with the requirements and goals in the plan, including establishing source lists; and a description of the offeror's efforts to locate small business, veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns and award subcontracts to them. The records shall include at least the following (on a plant-wide or company-wide basis, unless otherwise indicated)

(i) Source lists (e.g., PRO-Net), guides, and other data that identify small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns.

(ii) Organizations contacted in an attempt to locate sources that are small business, veteran-owned small business, HUBZone small business, small disadvantaged business, or women-owned small business concerns.

(iii) Records on each subcontract solicitation resulting in an award of more than \$100,000, indicating--

(A) Whether small business concerns were solicited and, if not, why not;

(B) Whether veteran-owned small business concerns were solicited and, if not, why not;

(C) Whether HUBZone small business concerns were solicited and, if not, why not;

(D) Whether small disadvantaged business concerns were solicited and, if not, why not;

(E) Whether women-owned small business concerns were solicited and, if not, why not; and

(F) If applicable, the reason award was not made to a small business concern.

(iv) Records of any outreach efforts to contact--

(A) Trade associations;

(B) Business development organizations;

(C) Conferences and trade fairs to locate small, HUBZone small, small disadvantaged, and women-owned small business sources; and

(D) Veterans service organizations.

(v) Records of internal guidance and encouragement provided to buyers through--

(A) Workshops, seminars, training, etc.; and

(B) Monitoring performance to evaluate compliance with the program's requirements.

(vi) On a contract-by-contract basis, records to support award data submitted by the offeror to the Government, including the name, address, and business size of each subcontractor. Contractors having commercial plans need not comply with this requirement.

(e) In order to effectively implement this plan to the extent consistent with efficient contract performance, the Contractor shall perform the following functions:

(1) Assist small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation by such concerns. Where the Contractor's lists of potential small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business subcontractors are excessively long, reasonable effort shall be made to give all such small business concerns an opportunity to compete over a period of time.

(2) Provide adequate and timely consideration of the potentialities of small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns in all "make-or-buy" decisions.

(3) Counsel and discuss subcontracting opportunities with representatives of small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business firms.

(4) Provide notice to subcontractors concerning penalties and remedies for misrepresentations of business status as small, veteran-owner small business, HUBZone small, small disadvantaged, or women-owned small business for the purpose of obtaining a subcontract that is to be included as part or all of a goal contained in the Contractor's subcontracting plan.

(f) A master plan on a plant or division-wide basis that contains all the elements required by paragraph (d) of this clause, except goals, may be incorporated by reference as a part of the subcontracting plan required of the offeror by this clause; provided--

(1) the master plan has been approved, (2) the offeror ensures that the master plan is updated as necessary and provides copies of the approved master plan, including evidence of its approval, to the Contracting Officer, and (3) goals and any deviations from the master plan deemed necessary by the Contracting Officer to satisfy the requirements of this contract are set forth in the individual subcontracting plan.

(g) A commercial plan is the preferred type of subcontracting plan for contractors furnishing commercial items. The commercial plan shall relate to the offeror's planned subcontracting generally, for both commercial and Government business, rather than solely to the Government contract. Commercial plans are also preferred for subcontractors that provide commercial items under a prime contract, whether or not the prime contractor is supplying a commercial item.

(h) Prior compliance of the offeror with other such subcontracting plans under previous contracts will be considered by the Contracting Officer in determining the responsibility of the offeror for award of the contract.

(i) The failure of the Contractor or subcontractor to comply in good faith with (1) the clause of this contract entitled "Utilization Of Small Business Concerns," or (2) an approved plan required by this clause, shall be a material breach of the contract.

(j) The Contractor shall submit the following reports:

(1) Standard Form 294, Subcontracting Report for Individual Contracts. This report shall be submitted to the Contracting Officer semiannually and at contract completion. The report covers subcontract award data related to this contract. This report is not required for commercial plans.

(2) Standard Form 295, Summary Subcontract Report. This report encompasses all of the contracts with the awarding agency. It must be submitted semi-annually for contracts with the Department of Defense and annually for contracts with civilian agencies. If the reporting activity is covered by a commercial plan, the reporting activity must report annually all subcontract awards under that plan. All reports submitted at the close of each fiscal year (both individual and commercial plans) shall include a breakout, in the Contractor's format, of subcontract awards, in whole dollars, to small disadvantaged business concerns by North American Industry Classification System (NAICS) Industry Subsector. For a commercial plan, the Contractor may obtain from each of its subcontractors a predominant NAICS Industry Subsector and report all awards to that subcontractor under its predominant NAICS Industry Subsector.

(End of clause)

52.219-16 LIQUIDATED DAMAGES-SUBCONTRACTING PLAN (JAN 1999)

(a) Failure to make a good faith effort to comply with the subcontracting plan, as used in this clause, means a willful or intentional failure to perform in accordance with the requirements of the subcontracting plan approved under the clause in this contract entitled "Small Business Subcontracting Plan," or willful or intentional action to frustrate the plan.

(b) Performance shall be measured by applying the percentage goals to the total actual subcontracting dollars or, if a commercial plan is involved, to the pro rata share of actual subcontracting dollars attributable to Government contracts covered by the commercial plan. If, at contract completion or, in the case of a commercial plan, at the close of the fiscal year for which the plan is applicable, the Contractor has failed to meet its subcontracting goals and the Contracting Officer decides in accordance with paragraph (c) of this clause that the Contractor failed to make a good faith effort to comply with its subcontracting plan, established in accordance with the clause in this contract entitled "Small Business Subcontracting Plan," the Contractor shall pay the Government liquidated damages in an amount stated. The amount of probable damages attributable to the Contractor's failure to comply shall be an amount equal to the actual dollar amount by which the Contractor failed to achieve each subcontract goal.

(c) Before the Contracting Officer makes a final decision that the Contractor has failed to make such good faith effort, the Contracting Officer shall give the Contractor written notice specifying the failure and permitting the Contractor to demonstrate what good faith efforts have been made and to discuss the matter. Failure to respond to the notice may be taken as an admission that no valid explanation exists. If, after consideration of all the pertinent data, the Contracting Officer finds that the Contractor failed to make a good faith effort to comply with the subcontracting plan, the Contracting Officer shall issue a final decision to that effect and require that the Contractor pay the Government liquidated damages as provided in paragraph (b) of this clause.

(d) With respect to commercial plans, the Contracting Officer who approved the plan will perform the functions of the Contracting Officer under this clause on behalf of all agencies with contracts covered by the commercial plan.

(e) The Contractor shall have the right of appeal, under the clause in this contract entitled Disputes, from any final decision of the Contracting Officer.

(f) Liquidated damages shall be in addition to any other remedies that the Government may have.

(End of clause)

52.222-1 NOTICE TO THE GOVERNMENT OF LABOR DISPUTES (FEB 1997)

If the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely

performance of this contract, the Contractor shall immediately give notice, including all relevant information, to the Contracting Officer.

52.222-3 CONVICT LABOR (AUG 1996)

The Contractor agrees not to employ in the performance of this contract any person undergoing a sentence of imprisonment which has been imposed by any court of a State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or the Trust Territory of the Pacific Islands. This limitation, however, shall not prohibit the employment by the Contractor in the performance of this contract of persons on parole or probation to work at paid employment during the term of their sentence or persons who have been pardoned or who have served their terms. Nor shall it prohibit the employment by the Contractor in the performance of this contract of persons confined for violation of the laws of any of the States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or the Trust Territory of the Pacific Islands who are authorized to work at paid employment in the community under the laws of such jurisdiction, if--

- (a)(1) The worker is paid or is in an approved work training program on a voluntary basis;
 - (2) Representatives of local union central bodies or similar labor union organizations have been consulted;
 - (3) Such paid employment will not result in the displacement of employed workers, or be applied in skills, crafts, or trades in which there is a surplus of available gainful labor in the locality, or impair existing contracts for services; and
 - (4) The rates of pay and other conditions of employment will not be less than those paid or provided for work of a similar nature in the locality in which the work is being performed; and
- (b) The Attorney General of the United States has certified that the work-release laws or regulations of the jurisdiction involved are in conformity with the requirements of Executive Order 11755, as amended by Executive Orders 12608 and 12943.

(End of clause)

52.222-4 CONTRACT WORK HOURS AND SAFETY STANDARDS ACT - OVERTIME COMPENSATION. (SEP 2000)

- (a) Overtime requirements. No Contractor or subcontractor employing laborers or mechanics (see Federal Acquisition Regulation 22.300) shall require or permit them to work over 40 hours in any workweek unless they are paid at least 1 and 1/2 times the basic rate of pay for each hour worked over 40 hours.
- (b) Violation; liability for unpaid wages; liquidated damages. The responsible Contractor and subcontractor are liable for unpaid wages if they violate the terms in paragraph (a) of this clause. In addition, the Contractor and subcontractor are liable for liquidated damages payable to the Government. The Contracting Officer will assess liquidated damages at the rate of \$10 per affected employee for each calendar day on which the employer required or permitted the employee to work in excess of the standard workweek of 40 hours without paying overtime wages required by the Contract Work Hours and Safety Standards Act.
- (c) Withholding for unpaid wages and liquidated damages. The Contracting Officer will withhold from payments due under the contract sufficient funds required to satisfy any Contractor or subcontractor liabilities for unpaid wages and liquidated damages. If amounts withheld under the contract are insufficient to satisfy Contractor or subcontractor liabilities, the Contracting Officer will withhold payments from other Federal or Federally assisted contracts held by the same Contractor that are subject to the Contract Work Hours and Safety Standards Act.

(d) Payrolls and basic records.

(1) The Contractor and its subcontractors shall maintain payrolls and basic payroll records for all laborers and mechanics working on the contract during the contract and shall make them available to the Government until 3 years after contract completion. The records shall contain the name and address of each employee, social security number, labor classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. The records need not duplicate those required for construction work by Department of Labor regulations at 29 CFR 5.5(a)(3) implementing the Davis-Bacon Act.

(2) The Contractor and its subcontractors shall allow authorized representatives of the Contracting Officer or the Department of Labor to inspect, copy, or transcribe records maintained under paragraph (d)(1) of this clause. The Contractor or subcontractor also shall allow authorized representatives of the Contracting Officer or Department of Labor to interview employees in the workplace during working hours.

(e) Subcontracts. The Contractor shall insert the provisions set forth in paragraphs (a) through (d) of this clause in subcontracts exceeding \$100,000 and require subcontractors to include these provisions in any lower tier subcontracts. The Contractor shall be responsible for compliance by any subcontractor or lower-tier subcontractor with the provisions set forth in paragraphs (a) through (d) of this clause.

(End of clause)

52.222-6 DAVIS-BACON ACT (FEB 1995)

(a) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (d) of this clause; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such period. Such laborers and mechanics shall be paid not less than the appropriate wage rate and fringe benefits in the wage determination for the classification of work actually performed, without regard to skill, except as provided in the clause entitled Apprentices and Trainees. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein; provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph (b) of this clause) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(b)(1) The Contracting Officer shall require that any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The Contracting Officer shall approve an additional classification and wage rate and fringe benefits therefor only when all the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination.

(ii) The classification is utilized in the area by the construction industry.

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage

rates contained in the wage determination.

(2) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the Contracting Officer agree on the classification and wage rate (including the amount designated for fringe benefits, where appropriate), a report of the action taken shall be sent by the Contracting Officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator or an authorized representative will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.

(3) In the event the Contractor, the laborers or mechanics to be employed in the classification, or their representatives, and the Contracting Officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the Contracting Officer shall refer the questions, including the views of all interested parties and the recommendation of the Contracting Officer, to the Administrator of the Wage and Hour Division for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits, where appropriate) determined pursuant to subparagraphs (b)(2) and (b)(3) of this clause shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(c) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the Contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(d) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program; provided, That the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

52.222-7 WITHHOLDING OF FUNDS (FEB 1988)

The Contracting Officer shall, upon his or her own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same Prime Contractor, or any other Federally assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same Prime Contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the Contracting Officer may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

52.222-8 PAYROLLS AND BASIC RECORDS (FEB 1988)

(a) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of 3 years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made, and actual wages paid. Whenever the Secretary of Labor has

found, under paragraph (d) of the clause entitled Davis-Bacon Act, that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(b)(1) The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Contracting Officer. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under paragraph (a) of this clause. This information may be submitted in any form desired. Optional Form WH-347 (Federal Stock Number 029-005-00014-1) is available for this purpose and may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. The Prime Contractor is responsible for the submission of copies of payrolls by all subcontractors.

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify--

(i) That the payroll for the payroll period contains the information required to be maintained under paragraph (a) of this clause and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR Part 3; and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph (b)(2) of this clause.

(4) The falsification of any of the certifications in this clause may subject the Contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 3729 of Title 31 of the United States Code.

(c) The Contractor or subcontractor shall make the records required under paragraph (a) of this clause available for inspection, copying, or transcription by the Contracting Officer or authorized representatives of the Contracting Officer or the Department of Labor. The Contractor or subcontractor shall permit the Contracting Officer or representatives of the Contracting Officer or the Department of Labor to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit required records or to make them available, the Contracting Officer may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

52.222-9 APPRENTICES AND TRAINEES (FEB 1988)

(a) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship

and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in this paragraph, shall be paid not less than the applicable wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(b) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed in the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate in the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate in the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate in the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(c) Equal employment opportunity. The utilization of apprentices, trainees, and journeymen under this clause shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

52.222-10 COMPLIANCE WITH COPELAND ACT REQUIREMENTS (FEB 1988)

The Contractor shall comply with the requirements of 29 CFR Part 3, which are hereby incorporated by reference in this contract.

52.222-11 SUBCONTRACTS (LABOR STANDARDS (FEB 1988)

(a) The Contractor or subcontractor shall insert in any subcontracts the clauses entitled Davis-Bacon Act, Contract Work Hours and Safety Standards Act-Overtime Compensation, Apprentices and Trainees, Payrolls and Basic Records, Compliance with Copeland Act Requirements, Withholding of Funds, Subcontracts (Labor Standards), Contract Termination-Debarment, Disputes Concerning Labor Standards, Compliance with Davis-Bacon and Related Act Regulations, and Certification of Eligibility, and such other clauses as the Contracting Officer may, by appropriate instructions, require, and also a clause requiring subcontractors to include these clauses in any lower tier subcontracts. The Prime Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with all the contract clauses cited in this paragraph.

(b)(1) Within 14 days after award of the contract, the Contractor shall deliver to the Contracting Officer a completed Statement and Acknowledgment Form (SF 1413) for each subcontract, including the subcontractor's signed and dated acknowledgment that the clauses set forth in paragraph (a) of this clause have been included in the subcontract.

(2) Within 14 days after the award of any subsequently awarded subcontract the Contractor shall deliver to the Contracting Officer an updated completed SF 1413 for such additional subcontract.

52.222-12 CONTRACT TERMINATION--DEBARMENT (FEB 1988)

A breach of the contract clauses entitled Davis-Bacon Act, Contract Work Hours and Safety Standards Act--Overtime Compensation, Apprentices and Trainees, Payrolls and Basic Records, Compliance with Copeland Act Requirements, Subcontracts (Labor Standards), Compliance with Davis-Bacon and Related Act Regulations, or Certification of Eligibility may be grounds for termination of the contract, and for debarment as a Contractor and subcontractor as provided in 29 CFR 5.12.

52.222-13 COMPLIANCE WITH DAVIS-BACON AND RELATED ACT REGULATIONS (FEB 1988)

All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are hereby incorporated by reference in this contract.

52.222-14 DISPUTES CONCERNING LABOR STANDARDS (FEB 1988)

The United States Department of Labor has set forth in 29 CFR Parts 5, 6, and 7 procedures for resolving disputes concerning labor standards requirements. Such disputes shall be resolved in accordance with those procedures and not the Disputes clause of this contract. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

52.222-15 CERTIFICATION OF ELIGIBILITY (FEB 1988)

(a) By entering into this contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(b) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(c) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

52.222-16 APPROVAL OF WAGE RATES (FEB 1988)

All straight time wage rates, and overtime rates based thereon, for laborers and mechanics engaged in work under this contract must be submitted for approval in writing by the head of the contracting activity or a representative expressly designated for this purpose, if the straight time wages exceed the rates for corresponding classifications contained in the applicable Davis-Bacon Act minimum wage determination included in the contract. Any amount paid by the Contractor to any laborer or mechanic in excess of the agency approved wage rate shall be at the expense of the Contractor and shall not be reimbursed by the Government. If the Government refuses to authorize the use of the overtime, the Contractor is not released from the obligation to pay employees at the required overtime rates for any overtime actually worked.

52.222-20 WALSH-HEALEY PUBLIC CONTRACTS ACT (DEC 1996)

If this contract is for the manufacture or furnishing of materials, supplies, articles or equipment in an amount that exceeds or may exceed \$10,000, and is subject to the Walsh-Healey Public Contracts Act, as amended (41 U.S.C. 35-45), the following terms and conditions apply:

(a) All stipulations required by the Act and regulations issued by the Secretary of Labor (41 CFR Chapter 50) are incorporated by reference. These stipulations are subject to all applicable rulings and interpretations of the Secretary of Labor that are now, or may hereafter, be in effect.

(b) All employees whose work relates to this contract shall be paid not less than the minimum wage prescribed by regulations issued by the Secretary of Labor (41 CFR 50-202.2). Learners, student learners, apprentices, and handicapped workers may be employed at less than the prescribed minimum wage (see 41 CFR 50-202.3) to the same extent that such employment is permitted under Section 14 of the Fair Labor Standards Act (41 U.S.C. 40).

52.222-23 NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY FOR CONSTRUCTION (FEB 1999)

(a) The offeror's attention is called to the Equal Opportunity clause and the Affirmative Action Compliance Requirements for Construction clause of this solicitation.

(b) The goals for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Goals for minority participation for each trade	Goals for female participation for each trade
3.0	6.9

These goals are applicable to all the Contractor's construction work performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, the Contractor shall apply the goals established for the geographical area where the work is actually performed. Goals are published periodically in the Federal Register in notice form, and these notices may be obtained from any Office of Federal Contract Compliance Programs office.

(c) The Contractor's compliance with Executive Order 11246, as amended, and the regulations in 41 CFR 60-4 shall be based on (1) its implementation of the Equal Opportunity clause, (2) specific affirmative action obligations required by the clause entitled "Affirmative Action Compliance Requirements for Construction," and (3) its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform

throughout the length of the contract, and in each trade. The Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor, or from project to project, for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, Executive Order 11246, as amended, and the regulations in 41 CFR 60-4. Compliance with the goals will be measured against the total work hours performed.

(d) The Contractor shall provide written notification to the Deputy Assistant Secretary for Federal Contract Compliance, U.S. Department of Labor, within 10 working days following award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the --

(1) Name, address, and telephone number of the subcontractor;

(2) Employer's identification number of the subcontractor;

(3) Estimated dollar amount of the subcontract;

(4) Estimated starting and completion dates of the subcontract; and

(5) Geographical area in which the subcontract is to be performed.

(e) As used in this Notice, and in any contract resulting from this solicitation, the "covered area" is **Shoshone, County**

52.222-26 EQUAL OPPORTUNITY (FEB 1999)

(a) If, during any 12-month period (including the 12 months preceding the award of this contract), the Contractor has been or is awarded nonexempt Federal contracts and/or subcontracts that have an aggregate value in excess of \$10,000, the Contractor shall comply with subparagraphs (b)(1) through (11) of this clause. Upon request, the Contractor shall provide information necessary to determine the applicability of this clause.

(b) During performing this contract, the Contractor agrees as follows:

(1) The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. However, it shall not be a violation of this clause for the Contractor to extend a publicly announced preference in employment to Indians living on or near an Indian reservation, in connection with employment opportunities on or near an Indian reservation, as permitted by 41 CFR 60-1.5.

(2) The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. This shall include, but not be limited to, (i) employment, (ii) upgrading, (iii) demotion, (iv) transfer, (v) recruitment or recruitment advertising, (vi) layoff or termination, (vii) rates of pay or other forms of compensation, and (viii) selection for training, including apprenticeship.

(3) The Contractor shall post in conspicuous places available to employees and applicants for employment the notices to be provided by the Contracting Officer that explain this clause.

(4) The Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

(5) The Contractor shall send, to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, the notice to be provided by the Contracting Officer advising the labor union or workers' representative of the Contractor's commitments under this clause, and post copies of the notice in conspicuous places available to employees and applicants for employment.

(6) The Contractor shall comply with Executive Order 11246, as amended, and the rules, regulations, and orders of the Secretary of Labor.

(7) The Contractor shall furnish to the contracting agency all information required by Executive Order 11246, as amended, and by the rules, regulations, and orders of the Secretary of Labor. The Contractor shall also file Standard Form 100 (EEO-1), or any successor form, as prescribed in 41 CFR part 60-1. Unless the Contractor has filed within the 12 months preceding the date of contract award, the Contractor shall, within 30 days after contract award, apply to either the regional Office of Federal Contract Compliance Programs (OFCCP) or the local office of the Equal Employment Opportunity Commission for the necessary forms.

(8) The Contractor shall permit access to its premises, during normal business hours, by the contracting agency or the OFCCP for the purpose of conducting on-site compliance evaluations and complaint investigations. The Contractor shall permit the Government to inspect and copy any books, accounts, records (including computerized records), and other material that may be relevant to the matter under investigation and pertinent to compliance with Executive Order 11246, as amended, and rules and regulations that implement the Executive Order.

(9) If the OFCCP determines that the Contractor is not in compliance with this clause or any rule, regulation, or order of the Secretary of Labor, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts, under the procedures authorized in Executive Order 11246, as amended. In addition, sanctions may be imposed and remedies invoked against the Contractor as provided in Executive Order 11246, as amended; in the rules, regulations, and orders of the Secretary of Labor; or as otherwise provided by law.

(10) The Contractor shall include the terms and conditions of subparagraphs (b)(1) through (11) of this clause in every subcontract or purchase order that is not exempted by the rules, regulations, or orders of the Secretary of Labor issued under Executive Order 11246, as amended, so that these terms and conditions will be binding upon each subcontractor or vendor.

(11) The Contractor shall take such action with respect to any subcontract or purchase order as the contracting officer may direct as a means of enforcing these terms and conditions, including sanctions for noncompliance; provided, that if the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of any direction, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

(c) Notwithstanding any other clause in this contract, disputes relative to this clause will be governed by the procedures in 41 CFR 60-1.1.

52.222-27 AFFIRMATIVE ACTION COMPLIANCE REQUIREMENTS FOR CONSTRUCTION (FEB 1999)

(a) Definitions. "Covered area," as used in this clause, means the geographical area described in the solicitation for this contract.

"Deputy Assistant Secretary," as used in this clause, means Deputy Assistant Secretary for Federal Contract Compliance, U.S. Department of Labor, or a designee.

"Employer's identification number," as used in this clause, means the Federal Social Security number used on the employer's quarterly federal tax return, U.S. Treasury Department Form 941.

"Minority," as used in this clause, means--

(1) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

(2) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast

Asia, the Indian Subcontinent, or the Pacific Islands);

(3) Black (all persons having origins in any of the black African racial groups not of Hispanic origin); and

(4) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race).

(b) If the Contractor, or a subcontractor at any tier, subcontracts a portion of the work involving any construction trade, each such subcontract in excess of \$10,000 shall include this clause and the Notice containing the goals for minority and female participation stated in the solicitation for this contract.

(c) If the Contractor is participating in a Hometown Plan (41 CFR 60-4) approved by the U.S. Department of Labor in a covered area, either individually or through an association, its affirmative action obligations on all work in the plan area (including goals) shall comply with the plan for those trades that have unions participating in the plan. Contractors must be able to demonstrate participation in, and compliance with, the provisions of the plan. Each Contractor or subcontractor participating in an approved plan is also required to comply with its obligations under the Equal Opportunity clause, and to make a good faith effort to achieve each goal under the plan in each trade in which it has employees. The overall good-faith performance by other Contractors or subcontractors toward a goal in an approved plan does not excuse any Contractor's or subcontractor's failure to make good-faith efforts to achieve the plan's goals.

(d) The Contractor shall implement the affirmative action procedures in subparagraphs (g)(1) through (16) of this clause. The goals stated in the solicitation for this contract are expressed as percentages of the total hours of employment and training of minority and female utilization that the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for the geographical area where that work is actually performed. The Contractor is expected to make substantially uniform progress toward its goals in each craft.

(e) Neither the terms and conditions of any collective bargaining agreement, nor the failure by a union with which the Contractor has a collective bargaining agreement, to refer minorities or women shall excuse the Contractor's obligations under this clause, Executive Order 11246, as amended, or the regulations thereunder.

(f) In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

(g) The Contractor shall take affirmative action to ensure equal employment opportunity. The evaluation of the Contractor's compliance with this clause shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully and implement affirmative action steps at least as extensive as the following:

(1) Ensure a working environment free of harassment, intimidation, and coercion at all sites and in all facilities where the Contractor's employees are assigned to work. The Contractor, if possible, will assign two or more women to each construction project. The Contractor shall ensure that foremen, superintendents, and other onsite supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at these sites or facilities.

(2) Establish and maintain a current list of sources for minority and female recruitment. Provide written notification to minority and female recruitment sources and community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

(3) Establish and maintain a current file of the names, addresses, and telephone numbers of each minority and

female off-the-street applicant, referrals of minorities or females from unions, recruitment sources, or community organizations, and the action taken with respect to each individual. If an individual was sent to the union hiring hall for referral and not referred back to the Contractor by the union or, if referred back, not employed by the Contractor, this shall be documented in the file, along with whatever additional actions the Contractor may have taken.

(4) Immediately notify the Deputy Assistant Secretary when the union or unions with which the Contractor has a collective bargaining agreement has not referred back to the Contractor a minority or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

(5) Develop on-the-job training opportunities and/or participate in training programs for the area that expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under subparagraph (g)(2) of this clause.

(6) Disseminate the Contractor's equal employment policy by--

(i) Providing notice of the policy to unions and to training, recruitment, and outreach programs, and requesting their cooperation in assisting the Contractor in meeting its contract obligations;

(ii) Including the policy in any policy manual and in collective bargaining agreements;

(iii) Publicizing the policy in the company newspaper, annual report, etc.;

(iv) Reviewing the policy with all management personnel and with all minority and female employees at least once a year; and

(v) Posting the policy on bulletin boards accessible to employees at each location where construction work is performed.

(7) Review, at least annually, the Contractor's equal employment policy and affirmative action obligations with all employees having responsibility for hiring, assignment, layoff, termination, or other employment decisions. Conduct review of this policy with all on-site supervisory personnel before initiating construction work at a job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

(8) Disseminate the Contractor's equal employment policy externally by including it in any advertising in the news media, specifically including minority and female news media. Provide written notification to, and discuss this policy with, other Contractors and subcontractors with which the Contractor does or anticipates doing business.

(9) Direct recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students, and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than 1 month before the date for acceptance of applications for apprenticeship or training by any recruitment source, send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

(10) Encourage present minority and female employees to recruit minority persons and women. Where reasonable, provide after-school, summer, and vacation employment to minority and female youth both on the site and in other areas of the Contractor's workforce.

(11) Validate all tests and other selection requirements where required under 41 CFR 60-3.

(12) Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities. Encourage these employees to seek or to prepare for, through appropriate training, etc.,

opportunities for promotion.

(13) Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment-related activities to ensure that the Contractor's obligations under this contract are being carried out.

(14) Ensure that all facilities and company activities are nonsegregated except that separate or single-user rest rooms and necessary dressing or sleeping areas shall be provided to assure privacy between the sexes.

(15) Maintain a record of solicitations for subcontracts for minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

(16) Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's equal employment policy and affirmative action obligations.

(h) The Contractor is encouraged to participate in voluntary associations that may assist in fulfilling one or more of the affirmative action obligations contained in subparagraphs (g)(1) through (16) of this clause. The efforts of a contractor association, joint contractor-union, contractor-community, or similar group of which the contractor is a member and participant may be asserted as fulfilling one or more of its obligations under subparagraphs (g)(1) through (16) of this clause, provided the Contractor--

(1) Actively participates in the group;

(2) Makes every effort to ensure that the group has a positive impact on the employment of minorities and women in the industry;

(3) Ensures that concrete benefits of the program are reflected in the Contractor's minority and female workforce participation;

(4) Makes a good-faith effort to meet its individual goals and timetables; and

(5) Can provide access to documentation that demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply is the Contractor's, and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

(i) A single goal for minorities and a separate single goal for women shall be established. The Contractor is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and nonminority. Consequently, the Contractor may be in violation of Executive Order 11246, as amended, if a particular group is employed in a substantially disparate manner.

(j) The Contractor shall not use goals or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

(k) The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts under Executive Order 11246, as amended.

(l) The Contractor shall carry out such sanctions and penalties for violation of this clause and of the Equal Opportunity clause, including suspension, termination, and cancellation of existing subcontracts, as may be imposed or ordered under Executive Order 11246, as amended, and its implementing regulations, by the OFCCP. Any failure to carry out these sanctions and penalties as ordered shall be a violation of this clause and Executive Order 11246, as amended.

(m) The Contractor in fulfilling its obligations under this clause shall implement affirmative action procedures at least as extensive as those prescribed in paragraph (g) of this clause, so as to achieve maximum results from its

efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of Executive Order 11246, as amended, the implementing regulations, or this clause, the Deputy Assistant Secretary shall take action as prescribed in 41 CFR 60-4.8.

(n) The Contractor shall designate a responsible official to--

(1) Monitor all employment-related activity to ensure that the Contractor's equal employment policy is being carried out;

(2) Submit reports as may be required by the Government; and

(3) Keep records that shall at least include for each employee the name, address, telephone number, construction trade, union affiliation (if any), employee identification number, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, separate records are not required to be maintained.

Nothing contained herein shall be construed as a limitation upon the application of other laws that establish different standards of compliance or upon the requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

52.222-35 AFFIRMATIVE ACTION FOR DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA (APR 1998)

(a)) Definitions. As used in this clause--

All employment openings includes all positions except executive and top management, those positions that will be filled from within the contractor's organization, and positions lasting 3 days or less. This term includes full-time employment, temporary employment of more than 3 days' duration, and part-time employment.

Appropriate office of the State employment service system means the local office of the Federal-State national system of public employment offices with assigned responsibility to serve the area where the employment opening is to be filled, including the District of Columbia, Guam, the Commonwealth of Puerto Rico, and the Virgin Islands.

Positions that will be filled from within the Contractor's organization means employment openings for which no consideration will be given to persons outside the Contractor's organization (including any affiliates, subsidiaries, and parent companies) and includes any openings that the Contractor proposes to fill from regularly established "recall" lists. The exception does not apply to a particular opening once an employer decides to consider applicants outside of its organization.

Veteran of the Vietnam era means a person who--

(1) Served on active duty for a period of more than 180 days, any part of which occurred between August 5, 1964, and May 7, 1975, and was discharged or released therefrom with other than a dishonorable discharge; or

(2) Was discharged or released from active duty for a service-connected disability if any part of such active duty was performed between August 5, 1964, and May 7, 1975.

(b) General. (1) Regarding any position for which the employee or applicant for employment is qualified, the Contractor shall not discriminate against the individual because the individual is a disabled veteran or a veteran of the Vietnam era. The Contractor agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified disabled veterans and veterans of the Vietnam era without discrimination based upon their disability or veterans' status in all employment practices such as--

- (i) Employment;
- (ii) Upgrading;
- (iii) Demotion or transfer;
- (iv) Recruitment;
- (v) Advertising;
- (vi) Layoff or termination;
- (vii) Rates of pay or other forms of compensation; and
- (viii) Selection for training, including apprenticeship.

(2) The Contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor (Secretary) issued under the Vietnam Era Veterans' Readjustment Assistance Act of 1972 (the Act), as amended.

(c) Listing openings. (1) The Contractor agrees to list all employment openings existing at contract award or occurring during contract performance, at an appropriate office of the State employment service system in the locality where the opening occurs. These openings include those occurring at any Contractor facility, including one not connected with performing this contract. An independent corporate affiliate is exempt from this requirement.

(2) State and local government agencies holding Federal contracts of \$10,000 or more shall also list all their employment openings with the appropriate office of the State employment service.

(3) The listing of employment openings with the State employment service system is required at least concurrently with using any other recruitment source or effort and involves the obligations of placing a bona fide job order, including accepting referrals of veterans and nonveterans. This listing does not require hiring any particular job applicant or hiring from any particular group of job applicants and is not intended to relieve the Contractor from any requirements of Executive orders or regulations concerning nondiscrimination in employment.

(4) Whenever the Contractor becomes contractually bound to the listing terms of this clause, it shall advise the State employment service system, in each State where it has establishments, of the name and location of each hiring location in the State. As long as the Contractor is contractually bound to these terms and has so advised the State system, it need not advise the State system of subsequent contracts. The Contractor may advise the State system when it is no longer bound by this contract clause.

(d) Applicability. This clause does not apply to the listing of employment openings that occur and are filled outside the 50 States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, and the Virgin Islands.

(e) Postings. (1) The Contractor agrees to post employment notices stating (i) the Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified disabled veterans and veterans of the Vietnam era, and (ii) the rights of applicants and employees.

(2) These notices shall be posted in conspicuous places that are available to employees and applicants for employment. They shall be in a form prescribed by the Deputy Assistant Secretary for Federal Contract Compliance Programs, Department of Labor (Deputy Assistant Secretary), and provided by or through the Contracting Officer.

(3) The Contractor shall notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the Contractor is bound by the terms of the Act, and is committed to take affirmative action to employ, and advance in employment, qualified disabled veterans and veterans of the Vietnam Era.

(f) Noncompliance. If the Contractor does not comply with the requirements of this clause, appropriate actions may be taken under the rules, regulations, and relevant orders of the Secretary issued pursuant to the Act.

(g) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order of \$10,000 or more unless exempted by rules, regulations, or orders of the Secretary. The Contractor shall act as specified by the Deputy Assistant Secretary to enforce the terms, including action for noncompliance.

(End of clause)

52.222-36 AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES (JUN 1998)

(a) General. (1) Regarding any position for which the employee or applicant for employment is qualified, the Contractor shall not discriminate against any employee or applicant because of physical or mental disability. The Contractor agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified individuals with disabilities without discrimination based upon their physical or mental disability in all employment practices such as--

(i) Recruitment, advertising, and job application procedures;

(ii) Hiring, upgrading, promotion, award of tenure, demotion, transfer, layoff, termination, right of return from layoff, and rehiring;

(iii) Rates of pay or any other form of compensation and changes in compensation;

(iv) Job assignments, job classifications, organizational structures, position descriptions, lines of progression, and seniority lists;

(v) Leaves of absence, sick leave, or any other leave;

(vi) Fringe benefits available by virtue of employment, whether or not administered by the Contractor;

(vii) Selection and financial support for training, including apprenticeships, professional meetings, conferences, and other related activities, and selection for leaves of absence to pursue training;

(viii) Activities sponsored by the Contractor, including social or recreational programs; and

(ix) Any other term, condition, or privilege of employment.

(2) The Contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor (Secretary) issued under the Rehabilitation Act of 1973 (29 U.S.C. 793) (the Act), as amended.

(b) Postings. (1) The Contractor agrees to post employment notices stating--

(i) The Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified individuals with disabilities; and

(ii) The rights of applicants and employees.

(2) These notices shall be posted in conspicuous places that are available to employees and applicants for employment. The Contractor shall ensure that applicants and employees with disabilities are informed of the contents of the notice (e.g., the Contractor may have the notice read to a visually disabled individual, or may lower the posted notice so that it might be read by a person in a wheelchair). The notices shall be in a form prescribed by the Deputy Assistant Secretary for Federal Contract Compliance of the U.S. Department of Labor (Deputy Assistant Secretary) and shall be provided by or through the Contracting Officer.

(3) The Contractor shall notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the Contractor is bound by the terms of Section 503 of the Act and is committed to take affirmative action to employ, and advance in employment, qualified individuals with physical or mental disabilities.

(c) Noncompliance. If the Contractor does not comply with the requirements of this clause, appropriate actions may be taken under the rules, regulations, and relevant orders of the Secretary issued pursuant to the Act.

(d) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order in excess of \$10,000 unless exempted by rules, regulations, or orders of the Secretary. The Contractor shall act as specified by the Deputy Assistant Secretary to enforce the terms, including action for noncompliance.

(End of clause)

52.222-41 SERVICE CONTRACT ACT OF 1965, AS AMENDED (MAY 1989)

(a) Definitions. "Act," as used in this clause, means the Service Contract Act of 1965, as amended (41 U.S.C. 351, et seq.).

"Contractor," as used in this clause or in any subcontract, shall be deemed to refer to the subcontractor, except in the term "Government Prime Contractor."

"Service employee," as used in this clause, means any person engaged in the performance of this contract other than any person employed in a bona fide executive, administrative, or professional capacity, as these terms are defined in Part 541 of Title 29, Code of Federal Regulations, as revised. It includes all such persons regardless of any contractual relationship that may be alleged to exist between a Contractor or subcontractor and such persons.

(b) Applicability. This contract is subject to the following provisions and to all other applicable provisions of the Act and regulations of the Secretary of Labor (29 CFR Part 4). This clause does not apply to contracts or subcontracts administratively exempted by the Secretary of Labor or exempted by 41 U.S.C. 356, as interpreted in Subpart C of 29 CFR Part 4.

(c) Compensation. (1) Each service employee employed in the performance of this contract by the Contractor or any subcontractor shall be paid not less than the minimum monetary wages and shall be furnished fringe benefits in accordance with the wages and fringe benefits determined by the Secretary of Labor, or authorized representative, as specified in any wage determination attached to this contract.

(2)(i) If a wage determination is attached to this contract, the Contractor shall classify any class of service employee which is not listed therein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination) so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination. Such conformed class of employees shall be paid the monetary wages and furnished the fringe benefits as are determined pursuant to the procedures in this paragraph (c).

(ii) This conforming procedure shall be initiated by the Contractor prior to the performance of contract work by the unlisted class of employee. The Contractor shall submit Standard Form (SF) 1444, Request For Authorization of Additional Classification and Rate, to the Contracting Officer no later than 30 days after the unlisted class of employee performs any contract work. The Contracting Officer shall review the proposed classification and rate and promptly submit the completed SF 1444 (which must include information regarding the agreement or disagreement of the employees' authorized representatives or the employees themselves together with the agency recommendation), and all pertinent information to the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor. The Wage and Hour Division will approve, modify, or disapprove the action or render a final determination in the event of disagreement within 30 days of receipt or will notify the Contracting Officer within 30 days of receipt that additional time is necessary.

(iii) The final determination of the conformance action by the Wage and Hour Division shall be transmitted to the Contracting Officer who shall promptly notify the Contractor of the action taken. Each affected employee shall be furnished by the Contractor with a written copy of such determination or it shall be posted as a part of the wage determination.

(iv)(A) The process of establishing wage and fringe benefit rates that bear a reasonable relationship to those listed in a wage determination cannot be reduced to any single formula. The approach used may vary from wage determination to wage determination depending on the circumstances. Standard wage and salary administration practices which rank various job classifications by pay grade pursuant to point schemes or other job factors may, for example, be relied upon. Guidance may also be obtained from the way different jobs are rated under Federal pay systems (Federal Wage Board Pay System and the General Schedule) or from other wage determinations issued in the same locality. Basic to the establishment of any conformable wage rate(s) is the concept that a pay relationship should be maintained between job classifications based on the skill required and the duties performed.

(B) In the case of a contract modification, an exercise of an option, or extension of an existing contract, or in any other case where a Contractor succeeds a contract under which the classification in question was previously conformed pursuant to paragraph (c) of this clause, a new conformed wage rate and fringe benefits may be assigned to the conformed classification by indexing (i.e., adjusting) the previous conformed rate and fringe benefits by an amount equal to the average (mean) percentage increase (or decrease, where appropriate) between the wages and fringe benefits specified for all classifications to be used on the contract which are listed in the current wage determination, and those specified for the corresponding classifications in the previously applicable wage determination. Where conforming actions are accomplished in accordance with this paragraph prior to the performance of contract work by the unlisted class of employees, the Contractor shall advise the Contracting Officer of the action taken but the other procedures in subdivision (c)(2)(ii) of this clause need not be followed.

(C) No employee engaged in performing work on this contract shall in any event be paid less than the currently applicable minimum wage specified under section 6(a)(1) of the Fair Labor Standards Act of 1938, as amended.

(v) The wage rate and fringe benefits finally determined under this subparagraph (c)(2) of this clause shall be paid to all employees performing in the classification from the first day on which contract work is performed by them in the classification. Failure to pay the unlisted employees the compensation agreed upon by the interested parties and/or finally determined by the Wage and Hour Division retroactive to the date such class of employees commenced contract work shall be a violation of the Act and this contract.

(vi) Upon discovery of failure to comply with subparagraph (c)(2) of this clause, the Wage and Hour Division shall make a final determination of conformed classification, wage rate, and/or fringe benefits which shall be retroactive to the date such class or classes of employees commenced contract work.

(3) Adjustment of Compensation. If the term of this contract is more than 1 year, the minimum monetary wages and fringe benefits required to be paid or furnished thereunder to service employees under this contract shall be subject to adjustment after 1 year and not less often than once every 2 years, under wage determinations issued by the Wage and Hour Division.

(d) Obligation to Furnish Fringe Benefits. The Contractor or subcontractor may discharge the obligation to furnish fringe benefits specified in the attachment or determined under subparagraph (c)(2) of this clause by furnishing equivalent combinations of bona fide fringe benefits, or by making equivalent or differential cash payments, only in accordance with Subpart D of 29 CFR Part 4.

(e) Minimum Wage. In the absence of a minimum wage attachment for this contract, neither the Contractor nor any subcontractor under this contract shall pay any person performing work under this contract (regardless of whether the person is a service employee) less than the minimum wage specified by section 6(a)(1) of the Fair Labor Standards Act of 1938. Nothing in this clause shall relieve the Contractor or any subcontractor of any other obligation under law or contract for payment of a higher wage to any employee.

(f) Successor Contracts. If this contract succeeds a contract subject to the Act under which substantially the same

services were furnished in the same locality and service employees were paid wages and fringe benefits provided for in a collective bargaining agreement, in the absence of the minimum wage attachment for this contract setting forth such collectively bargained wage rates and fringe benefits, neither the Contractor nor any subcontractor under this contract shall pay any service employee performing any of the contract work (regardless of whether or not such employee was employed under the predecessor contract), less than the wages and fringe benefits provided for in such collective bargaining agreement, to which such employee would have been entitled if employed under the predecessor contract, including accrued wages and fringe benefits and any prospective increases in wages and fringe benefits provided for under such agreement. No Contractor or subcontractor under this contract may be relieved of the foregoing obligation unless the limitations of 29 CFR 4.1b(b) apply or unless the Secretary of Labor or the Secretary's authorized representative finds, after a hearing as provided in 29 CFR 4.10 that the wages and/or fringe benefits provided for in such agreement are substantially at variance with those which prevail for services of a character similar in the locality, or determines, as provided in 29 CFR 4.11, that the collective bargaining agreement applicable to service employees employed under the predecessor contract was not entered into as a result of arm's length negotiations. Where it is found in accordance with the review procedures provided in 29 CFR 4.10 and/or 4.11 and Parts 6 and 8 that some or all of the wages and/or fringe benefits contained in a predecessor Contractor's collective bargaining agreement are substantially at variance with those which prevail for services of a character similar in the locality, and/or that the collective bargaining agreement applicable to service employees employed under the predecessor contract was not entered into as a result of arm's length negotiations, the Department will issue a new or revised wage determination setting forth the applicable wage rates and fringe benefits. Such determination shall be made part of the contract or subcontract, in accordance with the decision of the Administrator, the Administrative Law Judge, or the Board of Service Contract Appeals, as the case may be, irrespective of whether such issuance occurs prior to or after the award of a contract or subcontract (53 Comp. Gen. 401 (1973)). In the case of a wage determination issued solely as a result of a finding of substantial variance, such determination shall be effective as of the date of the final administrative decision.

(g) Notification to Employees. The Contractor and any subcontractor under this contract shall notify each service employee commencing work on this contract of the minimum monetary wage and any fringe benefits required to be paid pursuant to this contract, or shall post the wage determination attached to this contract. The poster provided by the Department of Labor (Publication WH 1313) shall be posted in a prominent and accessible place at the worksite. Failure to comply with this requirement is a violation of section 2(a)(4) of the Act and of this contract.

(h) Safe and Sanitary Working Conditions. The Contractor or subcontractor shall not permit any part of the services called for by this contract to be performed in buildings or surroundings or under working conditions provided by or under the control or supervision of the Contractor or subcontractor which are unsanitary, hazardous, or dangerous to the health or safety of the service employees. The Contractor or subcontractor shall comply with the safety and health standards applied under 29 CFR Part 1925.

(i) Records. (1) The Contractor and each subcontractor performing work subject to the Act shall make and maintain for 3 years from the completion of the work, and make them available for inspection and transcription by authorized representatives of the Wage and Hour Division, Employment Standards Administration, a record of the following:

(i) For each employee subject to the Act--

(A) Name and address and social security number;

(B) Correct work classification or classifications, rate or rates of monetary wages paid and fringe benefits provided, rate or rates of payments in lieu of fringe benefits, and total daily and weekly compensation;

(C) Daily and weekly hours worked by each employee; and

(D) Any deductions, rebates, or refunds from the total daily or weekly compensation of each employee.

(ii) For those classes of service employees not included in any wage determination attached to this contract, wage rates or fringe benefits determined by the interested parties or by the Administrator or authorized representative under the terms of paragraph (c) of this clause. A copy of the report required by subdivision (c)(2)(ii) of this clause

will fulfill this requirement.

(iii) Any list of the predecessor Contractor's employees which had been furnished to the Contractor as prescribed by paragraph (n) of this clause.

(2) The Contractor shall also make available a copy of this contract for inspection or transcription by authorized representatives of the Wage and Hour Division.

(3) Failure to make and maintain or to make available these records for inspection and transcription shall be a violation of the regulations and this contract, and in the case of failure to produce these records, the Contracting Officer, upon direction of the Department of Labor and notification to the Contractor, shall take action to cause suspension of any further payment or advance of funds until the violation ceases.

(4) The Contractor shall permit authorized representatives of the Wage and Hour Division to conduct interviews with employees at the worksite during normal working hours.

(j) Pay Periods. The Contractor shall unconditionally pay to each employee subject to the Act all wages due free and clear and without subsequent deduction (except as otherwise provided by law or regulations, 29 CFR Part 4), rebate, or kickback on any account. These payments shall be made no later than one pay period following the end of the regular pay period in which the wages were earned or accrued. A pay period under this Act may not be of any duration longer than semi-monthly.

(k) Withholding of Payments and Termination of Contract. The Contracting Officer shall withhold or cause to be withheld from the Government Prime Contractor under this or any other Government contract with the Prime Contractor such sums as an appropriate official of the Department of Labor requests or such sums as the Contracting Officer decides may be necessary to pay underpaid employees employed by the Contractor or subcontractor. In the event of failure to pay any employees subject to the Act all or part of the wages or fringe benefits due under the Act, the Contracting Officer may, after authorization or by direction of the Department of Labor and written notification to the Contractor, take action to cause suspension of any further payment or advance of funds until such violations have ceased. Additionally, any failure to comply with the requirements of this clause may be grounds for termination of the right to proceed with the contract work. In such event, the Government may enter into other contracts or arrangements for completion of the work, charging the Contractor in default with any additional cost.

(l) Subcontracts. The Contractor agrees to insert this clause in all subcontracts subject to the Act.

(m) Collective Bargaining Agreements Applicable to Service Employees. If wages to be paid or fringe benefits to be furnished any service employees employed by the Government Prime Contractor or any subcontractor under the contract are provided for in a collective bargaining agreement which is or will be effective during any period in which the contract is being performed, the Government Prime Contractor shall report such fact to the Contracting Officer, together with full information as to the application and accrual of such wages and fringe benefits, including any prospective increases, to service employees engaged in work on the contract, and a copy of the collective bargaining agreement. Such report shall be made upon commencing performance of the contract, in the case of collective bargaining agreements effective at such time, and in the case of such agreements or provisions or amendments thereof effective at a later time during the period of contract performance such agreements shall be reported promptly after negotiation thereof.

(n) Seniority List. Not less than 10 days prior to completion of any contract being performed at a Federal facility where service employees may be retained in the performance of the succeeding contract and subject to a wage determination which contains vacation or other benefit provisions based upon length of service with a Contractor (predecessor) or successor (29 CFR 4.173), the incumbent Prime Contractor shall furnish the Contracting Officer a certified list of the names of all service employees on the Contractor's or subcontractor's payroll during the last month of contract performance. Such list shall also contain anniversary dates of employment on the contract either with the current or predecessor Contractors of each such service employee. The Contracting Officer shall turn over such list to the successor Contractor at the commencement of the succeeding contract.

(o) Rulings and Interpretations. Rulings and interpretations of the Act are contained in Regulations, 29 CFR Part 4.

(p) Contractor's Certification. (1) By entering into this contract, the Contractor (and officials thereof) certifies that neither it (nor he or she) nor any person or firm who has a substantial interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of the sanctions imposed under section 5 of the Act.

(2) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract under section 5 of the Act.

(3) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

(q) Variations, Tolerances, and Exemptions Involving Employment. Notwithstanding any of the provisions in paragraphs (b) through (o) of this clause, the following employees may be employed in accordance with the following variations, tolerances, and exemptions, which the Secretary of Labor, pursuant to section 4(b) of the Act prior to its amendment by Pub. L. 92-473, found to be necessary and proper in the public interest or to avoid serious impairment of the conduct of Government business:

(1) Apprentices, student-learners, and workers whose earning capacity is impaired by age, physical or mental deficiency, or injury may be employed at wages lower than the minimum wages otherwise required by section 2(a)(1) or 2(b)(1) of the Act without diminishing any fringe benefits or cash payments in lieu thereof required under section 2(a)(2) of the Act, in accordance with the conditions and procedures prescribed for the employment of apprentices, student-learners, handicapped persons, and handicapped clients of sheltered workshops under section 14 of the Fair Labor Standards Act of 1938, in the regulations issued by the Administrator (29 CFR Parts 520, 521, 524, and 525).

(2) The Administrator will issue certificates under the Act for the employment of apprentices, student-learners, handicapped persons, or handicapped clients of sheltered workshops not subject to the Fair Labor Standards Act of 1938, or subject to different minimum rates of pay under the two acts, authorizing appropriate rates of minimum wages (but without changing requirements concerning fringe benefits or supplementary cash payments in lieu thereof), applying procedures prescribed by the applicable regulations issued under the Fair Labor Standards Act of 1938 (29 CFR Parts 520, 521, 524, and 525).

(3) The Administrator will also withdraw, annul, or cancel such certificates in accordance with the regulations in 29 CFR Parts 525 and 528.

(r) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed and individually registered in a bona fide apprenticeship program registered with a State Apprenticeship Agency which is recognized by the U.S. Department of Labor, or if no such recognized agency exists in a State, under a program registered with the Bureau of Apprenticeship and Training, Employment and Training Administration, U.S. Department of Labor. Any employee who is not registered as an apprentice in an approved program shall be paid the wage rate and fringe benefits contained in the applicable wage determination for the journeyman classification of work actually performed. The wage rates paid apprentices shall not be less than the wage rate for their level of progress set forth in the registered program, expressed as the appropriate percentage of the journeyman's rate contained in the applicable wage determination. The allowable ratio of apprentices to journeymen employed on the contract work in any craft classification shall not be greater than the ratio permitted to the Contractor as to his entire work force under the registered program.

(s) Tips. An employee engaged in an occupation in which the employee customarily and regularly receives more than \$30 a month in tips may have the amount of these tips credited by the employer against the minimum wage required by section 2(a)(1) or section 2(b)(1) of the Act, in accordance with section 3(m) of the Fair Labor Standards Act and Regulations, 29 CFR Part 531. However, the amount of credit shall not exceed \$1.34 per hour beginning January 1, 1981. To use this provision--

(1) The employer must inform tipped employees about this tip credit allowance before the credit is utilized;

(2) The employees must be allowed to retain all tips (individually or through a pooling arrangement and regardless of whether the employer elects to take a credit for tips received);

(3) The employer must be able to show by records that the employee receives at least the applicable Service Contract Act minimum wage through the combination of direct wages and tip credit; and

(4) The use of such tip credit must have been permitted under any predecessor collective bargaining agreement applicable by virtue of section 4(c) of the Act.

Disputes Concerning Labor Standards. The U.S. Department of Labor has set forth in 29 CFR Parts 4, 6, and 8 procedures for resolving disputes concerning labor standards requirements. Such disputes shall be resolved in accordance with those procedures and not the Disputes clause of this contract. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

(End of clause)

52.222-44 FAIR LABOR STANDARDS ACT AND SERVICE CONTRACT ACT--PRICE ADJUSTMENT (MAY 1989)

(a) This clause applies to both contracts subject to area prevailing wage determinations and contracts subject to Contractor collective bargaining agreements.

(b) The Contractor warrants that the prices in this contract do not include any allowance for any contingency to cover increased costs for which adjustment is provided under this clause.

(c) The contract price or contract unit price labor rates will be adjusted to reflect increases or decreases by the Contractor in wages and fringe benefits to the extent that these increases or decreases are made to comply with--

(1) An increased or decreased wage determination applied to this contract by operation of law; or

(2) An amendment to the Fair Labor Standards Act of 1938 that is enacted subsequent to award of this contract, affects the minimum wage, and becomes applicable to this contract under law.

(d) Any such adjustment will be limited to increases or decreases in wages and fringe benefits as described in paragraph (b) of this clause, and to the accompanying increases or decreases in social security and unemployment taxes and workers' compensation insurance; it shall not otherwise include any amount for general and administrative costs, overhead, or profit.

(e) The Contractor shall notify the Contracting Officer of any increase claimed under this clause within 30 days after the effective date of the wage change, unless this period is extended by the Contracting Officer in writing. The Contractor shall promptly notify the Contracting Officer of any decrease under this clause, but nothing in the clause shall preclude the Government from asserting a claim within the period permitted by law. The notice shall contain a statement of the amount claimed and any relevant supporting data that the Contracting Officer may reasonably require. Upon agreement of the parties, the contract price or contract unit price labor rates shall be modified in writing. The Contractor shall continue performance pending agreement on or determination of any such adjustment and its effective date.

(f) The Contracting Officer or an authorized representative shall, until the expiration of 3 years after final payment under the contract, have access to and the right to examine any directly pertinent books, documents, papers, and records of the Contractor.

(End of clause)

52.222-48 EXEMPTION FROM APPLICATION OF SERVICE CONTRACT ACT PROVISIONS FOR

CONTRACTS FOR MAINTENANCE, CALIBRATION, AND/OR REPAIR OF CERTAIN INFORMATION TECHNOLOGY, SCIENTIFIC AND MEDICAL AND/OR OFFICE AND BUSINESS EQUIPMENT--
CONTRACTOR CERTIFICATION (AUG. 1996)

(a) The following certification shall be checked:

CERTIFICATION

The offeror certifies [] , does not certify [] that: (1) The items of equipment to be serviced under this contract are commercial items which are used regularly for other than Government purposes, and are sold or traded by the Contractor in substantial quantities to the general public in the course of normal business operations; (2) The contract services are furnished at prices which are, or are based on, established catalog or market prices for the maintenance, calibration, and/or repair of certain information technology, scientific and medical and/or office and business equipment. An "established catalog price" is a price (including discount price) recorded in a catalog, price list, schedule, or other verifiable and established record that is regularly maintained by the manufacturer or the Contractor and is either published or otherwise available for inspection by customers. An "established market price" is a current price, established in the course of ordinary and usual trade between buyers and sellers free to bargain, which can be substantiated by data from sources independent of the manufacturer or Contractor; and (3) The Contractor utilizes the same compensation (wage and fringe benefits) plan for all service employees performing work under the contract as the Contractor uses for equivalent employees servicing the same equipment of commercial customers.

(b) If a negative certification is made and a Service Contract Act wage determination is not attached to the solicitation, the Contractor shall notify the Contracting Officer as soon as possible.

(c) Failure to execute the certification in paragraph (a) of this clause or to contact the Contracting Officer as required in paragraph (b) of this clause may render the bid or offer nonresponsive.

52.223-3 HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SAFETY DATA (JAN 1997)

(a) "Hazardous material", as used in this clause, includes any material defined as hazardous under the latest version of Federal Standard No. 313 (including revisions adopted during the term of the contract).

(b) The offeror must list any hazardous material, as defined in paragraph (a) of this clause, to be delivered under this contract. The hazardous material shall be properly identified and include any applicable identification number, such as National Stock Number or Special Item Number. This information shall also be included on the Material Safety Data Sheet submitted under this contract.

Material	Identification No.
(If none, insert "None")	

(c) This list must be updated during performance of the contract whenever the Contractor determines that any other material to be delivered under this contract is hazardous.

(d) The apparently successful offeror agrees to submit, for each item as required prior to award, a Material Safety Data Sheet, meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313,

for all hazardous material identified in paragraph (b) of this clause. Data shall be submitted in accordance with Federal Standard No. 313, whether or not the apparently successful offeror is the actual manufacturer of these items. Failure to submit the Material Safety Data Sheet prior to award may result in the apparently successful offeror being considered nonresponsive and ineligible for award.

(e) If, after award, there is a change in the composition of the item(s) or a revision to Federal Standard No. 313, which renders incomplete or inaccurate the data submitted under paragraph (d) of this clause, the Contractor shall promptly notify the Contracting Officer and resubmit the data.

(f) Neither the requirements of this clause nor any act or failure to act by the Government shall relieve the Contractor of any responsibility or liability for the safety of Government, Contractor, or subcontractor personnel or property.

(g) Nothing contained in this clause shall relieve the Contractor from complying with applicable Federal, State, and local laws, codes, ordinances, and regulations (including the obtaining of licenses and permits) in connection with hazardous material.

(h) The Government's rights in data furnished under this contract with respect to hazardous material are as follows:

(1) To use, duplicate and disclose any data to which this clause is applicable. The purposes of this right are to--

(i) Apprise personnel of the hazards to which they may be exposed in using, handling, packaging, transporting, or disposing of hazardous materials;

(ii) Obtain medical treatment for those affected by the material; and

(iii) Have others use, duplicate, and disclose the data for the Government for these purposes.

(2) To use, duplicate, and disclose data furnished under this clause, in accordance with subparagraph (h)(1) of this clause, in precedence over any other clause of this contract providing for rights in data.

(3) The Government is not precluded from using similar or identical data acquired from other sources.

(End of clause)

52.223-5 POLLUTION PREVENTION AND RIGHT-TO-KNOW INFORMATION (APR 1998)

(a) Executive Order 12856 of August 3, 1993, requires Federal facilities to comply with the provisions of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA)(42 U.S.C. 11001-11050) and the Pollution Prevention Act of 1990 (PPA)(42 U.S.C. 13101-13109).

(b) The Contractor shall provide all information needed by the Federal facility to comply with the emergency planning reporting requirements of Section 302 of EPCRA; the emergency notice requirements of Section 304 of EPCRA; the list of Material Safety Data Sheets required by Section 311 of EPCRA; the emergency and hazardous chemical inventory forms of Section 312 of EPCRA; the toxic chemical release inventory of Section 313 of EPCRA, which includes the reduction and recycling information required by Section 6607 of PPA; and the toxic chemical reduction goals requirements of Section 3-302 of Executive Order 12856.

52.223-6 DRUG-FREE WORKPLACE (JAN 1997)

(a) Definitions. As used in this clause --

"Controlled substance" means a controlled substance in schedules I through V of section 202 of the Controlled Substances Act (21 U.S.C. 812) and as further defined in regulation at 21 CFR 1308.11 - 1308.15.

"Conviction" means a finding of guilt (including a plea of nolo contendere) or imposition of sentence, or both, by any judicial body charged with the responsibility to determine violations of the Federal or State criminal drug statutes.

"Criminal drug statute" means a Federal or non-Federal criminal statute involving the manufacture, distribution, dispensing, possession, or use of any controlled substance.

"Drug-free workplace" means the site(s) for the performance of work done by the Contractor in connection with a specific contract at which employees of the Contractor are prohibited from engaging in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance.

"Employee" means an employee of a Contractor directly engaged in the performance of work under a Government contract. "Directly engaged" is defined to include all direct cost employees and any other Contractor employee who has other than a minimal impact or involvement in contract performance.

"Individual" means an offeror/contractor that has no more than one employee including the offeror/contractor.

(b) The Contractor, if other than an individual, shall-- within 30 days after award (unless a longer period is agreed to in writing for contracts of 30 days or more performance duration), or as soon as possible for contracts of less than 30 days performance duration--

(1) Publish a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition;

(2) Establish an ongoing drug-free awareness program to inform such employees about--

(i) The dangers of drug abuse in the workplace;

(ii) The Contractor's policy of maintaining a drug-free workplace;

(iii) Any available drug counseling, rehabilitation, and employee assistance programs; and

(iv) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

(3) Provide all employees engaged in performance of the contract with a copy of the statement required by subparagraph (b)(1) of this clause;

(4) Notify such employees in writing in the statement required by subparagraph (b)(1) of this clause that, as a condition of continued employment on this contract, the employee will--

(i) Abide by the terms of the statement; and

(ii) Notify the employer in writing of the employee's conviction under a criminal drug statute for a violation occurring in the workplace no later than 5 days after such conviction.

(5) Notify the Contracting Officer in writing within 10 days after receiving notice under subdivision (b)(4)(ii) of this clause, from an employee or otherwise receiving actual notice of such conviction. The notice shall include the position title of the employee;

(6) Within 30 days after receiving notice under subdivision (b)(4)(ii) of this clause of a conviction, take one of the following actions with respect to any employee who is convicted of a drug abuse violation occurring in the workplace:

- (i) Taking appropriate personnel action against such employee, up to and including termination; or
 - (ii) Require such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency; and
- (7) Make a good faith effort to maintain a drug-free workplace through implementation of subparagraphs (b)(1) through (b)(6) of this clause.
- (c) The Contractor, if an individual, agrees by award of the contract or acceptance of a purchase order, not to engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance while performing this contract.
- (d) In addition to other remedies available to the Government, the Contractor's failure to comply with the requirements of paragraph (b) or (c) of this clause may, pursuant to FAR 23.506, render the Contractor subject to suspension of contract payments, termination of the contract for default, and suspension or debarment.

(End of clause)

52.223-11 OZONE-DEPLETING SUBSTANCES (JUN 1996)

(a) Definitions. Ozone-depleting substance, as used in this clause, means any substance designated as Class I by the Environmental Protection Agency (EPA) (40 CFR Part 82), including but not limited to chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform; or any substance designated as Class II by EPA (40 CFR Part 82), including but not limited to hydrochlorofluorocarbons.

(b) The Contractor shall label products which contain or are manufactured with ozone-depleting substances in the manner and to the extent required by 42 U.S.C. 7671j (b), (c), and (d) and 40 CFR Part 82, Subpart E, as follows:

“WARNING: Contains (or manufactured with, if applicable) __*, a substance(s) which harm(s) public health and environment by destroying ozone in the upper atmosphere.”-----

* The Contractor shall insert the name of the substance(s).

52.223-14 TOXIC CHEMICAL RELEASE REPORTING (OCT 2000)

(a) Unless otherwise exempt, the Contractor, as owner or operator of a facility used in the performance of this contract, shall file by July 1 for the prior calendar year an annual Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023(a) and (g)), and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106). The Contractor shall file, for each facility subject to the Form R filing and reporting requirements, the annual Form R throughout the life of the contract.

(b) A Contractor owned or operated facility used in the performance of this contract is exempt from the requirement to file an annual Form R if--

(1) The facility does not manufacture, process, or otherwise use any toxic chemicals listed under section 313(c) of EPCRA, 42 U.S.C. 11023(c);

(2) The facility does not have 10 or more full-time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023(b)(1)(A);

(3) The facility does not meet the reporting thresholds of toxic chemicals established under of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

(4) The facility does not fall within Standard Industrial Classification Code (SIC) major groups 20 through 39 or their corresponding North American Industry Classification System (NAICS) sectors 31 through 33; or

(5) The facility is not located within any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, or any other territory or possession over which the United States has jurisdiction.

(c) If the Contractor has certified to an exemption in accordance with one or more of the criteria in paragraph (b) of this clause, and after award of the contract circumstances change so that any of its owned or operated facilities used in the performance of this contract is no longer exempt--

(1) The Contractor shall notify the Contracting Officer; and

(2) The Contractor, as owner or operator of a facility used in the performance of this contract that is no longer exempt, shall (i) submit a Toxic Chemical Release Inventory Form (Form R) on or before July 1 for the prior calendar year during which the facility becomes eligible; and (ii) continue to file the annual Form R for the life of the contract for such facility.

(d) The Contracting Officer may terminate this contract or take other action as appropriate, if the Contractor fails to comply accurately and fully with the EPCRA and PPA toxic chemical release filing and reporting requirements.

(e) Except for acquisitions of commercial items, as defined in FAR Part 2, the Contractor shall--

(1) For competitive subcontracts expected to exceed \$100,000 (including all options), include a solicitation provision substantially the same as the provision at FAR 52.223-13, Certification of Toxic Chemical Release Reporting; and

(2) Include in any resultant subcontract exceeding \$100,000 (including all options), the substance of this clause, except this paragraph (e).

52.225-11 BUY AMERICAN ACT--BALANCE OF PAYMENTS PROGRAM--CONSTRUCTION MATERIALS UNDER TRADE AGREEMENTS (FEB 2000)

(a) Definitions. As used in this clause--

Component means any article, material, or supply incorporated directly into construction materials.

Construction material means an article, material, or supply brought to the construction site by the Contractor or subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

Cost of components means--

(1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the end product (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or

(2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the end product.

Designated country means any of the following countries: Aruba, Austria, Bangladesh, Belgium, Benin, Bhutan, Botswana, Burkina Faso, Burundi, Canada, Cape Verde, Central African Republic, Chad, Comoros, Denmark.

Djibouti, Equatorial Guinea, Finland, France, Gambia, Germany, Greece, Guinea, Guinea-Bissau, Haiti, Hong Kong, Ireland, Israel, Italy, Japan.

Kiribati, Korea, Republic of, Lesotho, Liechtenstein, Luxembourg, Malawi, Maldives, Mali, Mozambique, Nepal, Netherlands, Niger, Norway, Portugal, Rwanda.

Sao Tome and Principe, Sierra Leone, Singapore, Somalia, Spain, Sweden, Switzerland, Tanzania U.R., Togo, Tuvalu, Uganda, United Kingdom, Vanuatu, Western Samoa, Yemen.

Designated country construction material means a construction material that--

(1) Is wholly the growth, product, or manufacture of a designated country; or

(2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a designated country into a new and different construction material distinct from the materials from which it was transformed.

Domestic construction material means--

(1) An unmanufactured construction material mined or produced in the United States; or

(2) A construction material manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic.

Foreign construction material means a construction material other than a domestic construction material.

North American Free Trade Agreement country means Canada or Mexico.

North American Free Trade Agreement country construction material means a construction material that--

(1) Is wholly the growth, product, or manufacture of a North American Free Trade Agreement (NAFTA) country; or

(2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a NAFTA country into a new and different construction material distinct from the materials from which it was transformed.

United States means the 50 States and the District of Columbia, U.S. territories and possessions, Puerto Rico, the Northern Mariana Islands, and any other place subject to U.S. jurisdiction, but does not include leased bases.

(b) Construction materials. (1) This clause implements the Buy American Act (41 U.S.C. 10a-10d) and the Balance of Payments Program by providing a preference for domestic construction material. In addition, the Contracting Officer has determined that the Trade Agreements Act and the North American Free Trade Agreement (NAFTA) apply to this acquisition. Therefore, the Buy American Act and Balance of Payments Program restrictions are waived for designated country and NAFTA country construction materials.

(2) The Contractor shall use only domestic, designated country, or NAFTA country construction material in performing this contract, except as provided in paragraphs (b)(3) and (b)(4) of this clause.

(3) The requirement in paragraph (b)(2) of this clause does not apply to the construction materials or components listed by the Government as follows: [Contracting Officer to list applicable excepted materials or indicate "none"]

(4) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(3) of this clause if the Government determines that--

(i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the restrictions of the Buy American Act is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent. For determination of unreasonable cost under the Balance of Payments Program, the Contracting Officer will use a factor of 50 percent;

(ii) The application of the restriction of the Buy American Act or Balance of Payments Program to a particular construction material would be impracticable or inconsistent with the public interest; or

(iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.

(c) Request for determination of inapplicability of the Buy American Act or Balance of Payments Program. (1)(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(4) of this clause shall include adequate information for Government evaluation of the request, including--

(A) A description of the foreign and domestic construction materials;

(B) Unit of measure;

(C) Quantity;

(D) Price;

(E) Time of delivery or availability;

(F) Location of the construction project;

(G) Name and address of the proposed supplier; and

(H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.

(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.

(iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).

(iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.

(2) If the Government determines after contract award that an exception to the Buy American Act or Balance of Payments Program applies and the Contracting Officer and the Contractor negotiate adequate consideration, the

Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(4)(i) of this clause.

(3) Unless the Government determines that an exception to the Buy American Act or Balance of Payments Program applies, use of foreign construction material is noncompliant with the Buy American Act or Balance of Payments Program.

(d) Data. To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domestic Construction Materials Price Comparison

Construction material description	Unit of measure	Quantity	Price (dollars) \1\
Item 1:			
Foreign construction material....			
Domestic construction material...			
Item 2:			
Foreign construction material....			
Domestic construction material...			

\1\ Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).

List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.

Include other applicable supporting information.

(End of clause)

52.225-13 RESTRICTIONS ON CERTAIN FOREIGN PURCHASES (JUL 2000)

(a) The Contractor shall not acquire, for use in the performance of this contract, any supplies or services originating from sources within, or that were located in or transported from or through, countries whose products are banned from importation into the United States under regulations of the Office of Foreign Assets Control, Department of the Treasury. Those countries are Cuba, Iran, Iraq, Libya, North Korea, Sudan, the territory of Afghanistan controlled by the Taliban, and Serbia (excluding the territory of Kosovo).

(b) The Contractor shall not acquire for use in the performance of this contract any supplies or services from entities controlled by the government of Iraq.

(c) The Contractor shall insert this clause, including this paragraph (c), in all subcontracts.

(End of clause)

52.226-1 UTILIZATION OF INDIAN ORGANIZATIONS AND INDIAN-OWNED ECONOMIC ENTERPRISES (JUN 2000)

(a) Definitions. As used in this clause:

"Indian" means any person who is a member of any Indian tribe, band, group, pueblo or community that is

recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs (BIA) in accordance with 25 U.S.C. 1452(c) and any "Native" as defined in the Alaska Native Claims Settlement Act (43 U.S.C. 1601).

"Indian organization" means the governing body of any Indian tribe or entity established or recognized by the governing body of an Indian tribe for the purposes of 25 U.S.C., chapter 17.

"Indian-owned economic enterprise" means any Indian-owned (as determined by the Secretary of the Interior) commercial, industrial, or business activity established or organized for the purpose of profit, provided that Indian ownership constitute a not less than 51 percent of the enterprise.

"Indian tribe" means any Indian tribe, band, group, pueblo or community, including native villages and native groups (including corporations organized by Kenai, Juneau, Sitka, and Kodiak) as defined in the Alaska Native Claims Settlement Act, that is recognized by the Federal Government as eligible for services from BIA in accordance with 25 U.S.C. 1542(c).

"Interested party" means a prime contractor or an actual or prospective offeror whose direct economic interest would be affected by the award of a subcontract or by the failure to award a subcontract.

(b) The Contractor shall use its best efforts to give Indian organizations and Indian-owned economic enterprises (25 U.S.C. 1544) the maximum practicable opportunity to participate in the subcontracts it awards to the fullest extent consistent with efficient performance of its contract.

(1) The Contracting Officer and the Contractor, acting in good faith, may rely on the representation of an Indian organization or Indian-owned economic enterprise as to its eligibility, unless an interested party challenges its status or the Contracting Officer has independent reason to question that status. In the event of a challenge to the representation of a subcontractor, the Contracting Officer will refer the matter to the U.S. Department of the Interior, Bureau of Indian Affairs (BIA), Attn: Chief, Division of Contracting and Grants Administration, 1849 C Street, NW., MS 2626-MIB, Washington, DC 20240-4000.

The BIA will determine the eligibility and notify the Contracting Officer. No incentive payment will be made within 50 working days of subcontract award or while a challenge is pending. If a subcontractor is determined to be an ineligible participant, no incentive payment will be made under the Indian Incentive Program.

(2) The Contractor may request an adjustment under the Indian Incentive Program to the following:

- (i) The estimated cost of a cost-type contract.
- (ii) The target cost of a cost-plus-incentive-fee prime contract.
- (iii) The target cost and ceiling price of a fixed-price incentive prime contract.
- (iv) The price of a firm-fixed-price prime contract.

(3) The amount of the adjustment to the prime contract is 5 percent of the estimated cost, target cost, or firm-fixed-price included in the subcontract initially awarded to the Indian organization or Indian-owned economic enterprise.

(4) The Contractor has the burden of proving the amount claimed and must assert its request for an adjustment prior to completion of contract performance.

(c) The Contracting Officer, subject to the terms and conditions of the contract and the availability of funds, will authorize an incentive payment of 5 percent of the amount paid to the subcontractor. The Contracting Officer will seek funding in accordance with agency procedures.

(End of clause)

52.227-1 AUTHORIZATION AND CONSENT (JUL 1995)

(a) The Government authorizes and consents to all use and manufacture, in performing this contract or any subcontract at any tier, of any invention described in and covered by a United States patent (1) embodied in the structure or composition of any article the delivery of which is accepted by the Government under this contract or (2) used in machinery, tools, or methods whose use necessarily results from compliance by the Contractor or a subcontractor with (i) specifications or written provisions forming a part of this contract or (ii) specific written instructions given by the Contracting Officer directing the manner of performance. The entire liability to the Government for infringement of a patent of the United States shall be determined solely by the provisions of the indemnity clause, if any, included in this contract or any subcontract hereunder (including any lower-tier subcontract), and the Government assumes liability for all other infringement to the extent of the authorization and consent hereinabove granted.

(b) The Contractor agrees to include, and require inclusion of, this clause, suitably modified to identify the parties, in all subcontracts at any tier for supplies or services (including construction, architect-engineer services, and materials, supplies, models, samples, and design or testing services expected to exceed the simplified acquisition threshold (however, omission of this clause from any subcontract, including those at or below the simplified acquisition threshold, does not affect this authorization and consent.)

52.227-4 PATENT INDEMNITY--CONSTRUCTION CONTRACTS (APR 1984)

Except as otherwise provided, the Contractor agrees to indemnify the Government and its officers, agents, and employees against liability, including costs and expenses, for infringement upon any United States patent (except a patent issued upon an application that is now or may hereafter be withheld from issue pursuant to a Secrecy Order under 35 U.S.C. 181) arising out of performing this contract or out of the use or disposal by or for the account of the Government of supplies furnished or work performed under this contract.

52.228-5 INSURANCE--WORK ON A GOVERNMENT INSTALLATION (JAN 1997)

(a) The Contractor shall, at its own expense, provide and maintain during the entire performance of this contract, at least the kinds and minimum amounts of insurance required in the Schedule or elsewhere in the contract.

(b) Before commencing work under this contract, the Contractor shall notify the Contracting Officer in writing that the required insurance has been obtained. The policies evidencing required insurance shall contain an endorsement to the effect that any cancellation or any material change adversely affecting the Government's interest shall not be effective (1) for such period as the laws of the State in which this contract is to be performed prescribe, or (2) until 30 days after the insurer or the Contractor gives written notice to the Contracting Officer, whichever period is longer.

(c) The Contractor shall insert the substance of this clause, including this paragraph (c), in subcontracts under this contract that require work on a Government installation and shall require subcontractors to provide and maintain the insurance required in the Schedule or elsewhere in the contract. The Contractor shall maintain a copy of all subcontractors' proofs of required insurance, and shall make copies available to the Contracting Officer upon request.

(End of clause)

52.228-11 PLEDGES OF ASSETS (FEB 1992)

(a) Offerors shall obtain from each person acting as an individual surety on a bid guarantee, a performance bond, or a payment bond--

(1) Pledge of assets; and

(2) Standard Form 28, Affidavit of Individual Surety.

(b) Pledges of assets from each person acting as an individual surety shall be in the form of--

(1) Evidence of an escrow account containing cash, certificates of deposit, commercial or Government securities, or other assets described in FAR 28.203-2 (except see 28.203-2(b)(2) with respect to Government securities held in book entry form) and/or;

(2) A recorded lien on real estate. The offeror will be required to provide--

(i) Evidence of title in the form of a certificate of title prepared by a title insurance company approved by the United States Department of Justice. This title evidence must show fee simple title vested in the surety along with any concurrent owners; whether any real estate taxes are due and payable; and any recorded encumbrances against the property, including the lien filed in favor of the Government as required by FAR 28.203-3(d);

(ii) Evidence of the amount due under any encumbrance shown in the evidence of title;

(iii) A copy of the current real estate tax assessment of the property or a current appraisal dated no earlier than 6 months prior to the date of the bond, prepared by a professional appraiser who certifies that the appraisal has been conducted in accordance with the generally accepted appraisal standards as reflected in the Uniform Standards of Professional Appraisal Practice, as promulgated by the Appraisal Foundation.

(End of clause)

52.228-14 IRREVOCABLE LETTER OF CREDIT (DEC 1999)

(a) "Irrevocable letter of credit" (ILC), as used in this clause, means a written commitment by a federally insured financial institution to pay all or part of a stated amount of money, until the expiration date of the letter, upon presentation by the Government (the beneficiary) of a written demand therefor. Neither the financial institution nor the offeror/Contractor can revoke or condition the letter of credit.

(b) If the offeror intends to use an ILC in lieu of a bid bond, or to secure other types of bonds such as performance and payment bonds, the letter of credit and letter of confirmation formats in paragraphs (e) and (f) of this clause shall be used.

(c) The letter of credit shall be irrevocable, shall require presentation of no document other than a written demand and the ILC (including confirming letter, if any), shall be issued/confirmed by an acceptable federally insured financial institution as provided in paragraph (d) of this clause, and--

(1) If used as a bid guarantee, the ILC shall expire no earlier than 60 days after the close of the bid acceptance period;

(2) If used as an alternative to corporate or individual sureties as security for a performance or payment bond, the offeror/Contractor may submit an ILC with an initial expiration date estimated to cover the entire period for which financial security is required or may submit an ILC with an initial expiration date that is a minimum period of one year from the date of issuance. The ILC shall provide that, unless the issuer provides the beneficiary written notice of non-renewal at least 60 days in advance of the current expiration date, the ILC is automatically extended without amendment for one year from the expiration date, or any future expiration date, until the period of required coverage is completed and the Contracting Officer provides the financial institution with a written statement waiving the right to payment. The period of required coverage shall be:

(i) For contracts subject to the Miller Act, the later of--

(A) One year following the expected date of final payment;

(B) For performance bonds only, until completion of any warranty period; or

(C) For payment bonds only, until resolution of all claims filed against the payment bond during the one-year period following final payment.

(ii) For contracts not subject to the Miller Act, the later of--

(A) 90 days following final payment; or

(B) For performance bonds only, until completion of any warranty period.

(d) Only federally insured financial institutions rated investment grade or higher shall issue or confirm the ILC. The offeror/Contractor shall provide the Contracting Officer a credit rating that indicates the financial institution has the required rating(s) as of the date of issuance of the ILC. Unless the financial institution issuing the ILC had letter of credit business of less than \$25 million in the past year, ILCs over \$5 million must be confirmed by another acceptable financial institution that had letter of credit business of less than \$25 million in the past year.

(e) The following format shall be used by the issuing financial institution to create an ILC:

[Issuing Financial Institution's Letterhead or Name and Address]

Issue Date _____

IRREVOCABLE LETTER OF CREDIT NO. _____

Account party's name _____

Account party's address _____

For Solicitation No. _____ (for reference only)

TO: [U.S. Government agency]

[U.S. Government agency's address]

1. We hereby establish this irrevocable and transferable Letter of Credit in your favor for one or more drawings up to United States \$ _____. This Letter of Credit is payable at [issuing financial institution's and, if any, confirming financial institution's] office at [issuing financial institution's address and, if any, confirming financial institution's address] and expires with our close of business on _____, or any automatically extended expiration date.

2. We hereby undertake to honor your or the transferee's sight draft(s) drawn on the issuing or, if any, the confirming financial institution, for all or any part of this credit if presented with this Letter of Credit and confirmation, if any, at the office specified in paragraph 1 of this Letter of Credit on or before the expiration date or any automatically extended expiration date.

3. [This paragraph is omitted if used as a bid guarantee, and subsequent paragraphs are renumbered.] It is a condition of this Letter of Credit that it is deemed to be automatically extended without amendment for one year from the expiration date hereof, or any future expiration date, unless at least 60 days prior to any expiration date, we

notify you or the transferee by registered mail, or other receipted means of delivery, that we elect not to consider this Letter of Credit renewed for any such additional period. At the time we notify you, we also agree to notify the account party (and confirming financial institution, if any) by the same means of delivery.

4. This Letter of Credit is transferable. Transfers and assignments of proceeds are to be effected without charge to either the beneficiary or the transferee/assignee of proceeds. Such transfer or assignment shall be only at the written direction of the Government (the beneficiary) in a form satisfactory to the issuing financial institution and the confirming financial institution, if any.

5. This Letter of Credit is subject to the Uniform Customs and Practice (UCP) for Documentary Credits, 1993 Revision, International Chamber of Commerce Publication No. 500, and to the extent not inconsistent therewith, to the laws of _____ [state of confirming financial institution, if any, otherwise state of issuing financial institution].

6. If this credit expires during an interruption of business of this financial institution as described in Article 17 of the UCP, the financial institution specifically agrees to effect payment if this credit is drawn against within 30 days after the resumption of our business.

Sincerely,

[Issuing financial institution]

(f) The following format shall be used by the financial institution to confirm an ILC:

[Confirming Financial Institution's Letterhead or Name and Address]

(Date) _____

Our Letter of Credit Advice Number _____

Beneficiary: _____ [U.S. Government agency]

Issuing Financial Institution: _____

Issuing Financial Institution's LC No.: _____

Gentlemen:

1. We hereby confirm the above indicated Letter of Credit, the original of which is attached, issued by _____ [name of issuing financial institution] for drawings of up to United States dollars _____/U.S. \$ _____ and expiring with our close of business on _____ [the expiration date], or any automatically extended expiration date.

2. Draft(s) drawn under the Letter of Credit and this Confirmation are payable at our office located at _____.

3. We hereby undertake to honor sight draft(s) drawn under and presented with the Letter of Credit and this Confirmation at our offices as specified herein.

4. [This paragraph is omitted if used as a bid guarantee, and subsequent paragraphs are renumbered.] It is a condition of this confirmation that it be deemed automatically extended without amendment for one year from the expiration date hereof, or any automatically extended expiration date, unless:

(a) At least 60 days prior to any such expiration date, we shall notify the Contracting Officer, or the transferee and the issuing financial institution, by registered mail or other receipted means of delivery, that we elect not to consider this confirmation extended for any such additional period; or

(b) The issuing financial institution shall have exercised its right to notify you or the transferee, the account party, and ourselves, of its election not to extend the expiration date of the Letter of Credit.

5. This confirmation is subject to the Uniform Customs and Practice (UCP) for Documentary Credits, 1993 Revision, International Chamber of Commerce Publication No. 500, and to the extent not inconsistent therewith, to the laws of _____ [state of confirming financial institution].

6. If this confirmation expires during an interruption of business of this financial institution as described in Article 17 of the UCP, we specifically agree to effect payment if this credit is drawn against within 30 days after the resumption of our business.

Sincerely,

[Confirming financial institution]

(g) The following format shall be used by the Contracting Officer for a sight draft to draw on the Letter of Credit:

SIGHT DRAFT

[City, State]

(Date) _____

[Name and address of financial institution]

Pay to the order of _____ [Beneficiary Agency] _____ the sum of United States \$ _____.
This draft is drawn under Irrevocable Letter of Credit No. _____.

[Beneficiary Agency]

By: _____

(End of clause)

52.228-15 PERFORMANCE AND PAYMENT BONDS--CONSTRUCTION (JUL 2000)-

(a) Definitions. As used in this clause--

Original contract price means the award price of the contract; or, for requirements contracts, the price payable for the estimated total quantity; or, for indefinite-quantity contracts, the price payable for the specified minimum quantity. Original contract price does not include the price of any options, except those options exercised at the time of contract award.

(b) Amount of required bonds. Unless the resulting contract price is \$100,000 or less, the successful offeror shall furnish performance and payment bonds to the Contracting Officer as follows:

(1) Performance bonds (Standard Form 25). The penal amount of performance bonds at the time of contract award shall be 100 percent of the original contract price.

(2) Payment Bonds (Standard Form 25-A). The penal amount of payment bonds at the time of contract award shall be 100 percent of the original contract price.

(3) Additional bond protection. (i) The Government may require additional performance and payment bond protection if the contract price is increased. The increase in protection generally will equal 100 percent of the increase in contract price.

(ii) The Government may secure the additional protection by directing the Contractor to increase the penal amount of the existing bond or to obtain an additional bond.

(c) Furnishing executed bonds. The Contractor shall furnish all executed bonds, including any necessary reinsurance agreements, to the Contracting Officer, within the time period specified in the Bid Guarantee provision of the solicitation, or otherwise specified by the Contracting Officer, but in any event, before starting work.

(d) Surety or other security for bonds. The bonds shall be in the form of firm commitment, supported by corporate sureties whose names appear on the list contained in Treasury Department Circular 570, individual sureties, or by other acceptable security such as postal money order, certified check, cashier's check, irrevocable letter of credit, or, in accordance with Treasury Department regulations, certain bonds or notes of the United States. Treasury Circular 570 is published in the Federal Register or may be obtained from the U.S. Department of Treasury, Financial Management Service, Surety Bond Branch, 401 14th Street, NW, 2nd Floor, West Wing, Washington, DC 20227.

(e) Notice of subcontractor waiver of protection (40 U.S.C. 270b(c)). Any waiver of the right to sue on the payment bond is void unless it is in writing, signed by the person whose right is waived, and executed after such person has first furnished labor or material for use in the performance of the contract.

(End of clause)

52.229-3 FEDERAL, STATE, AND LOCAL TAXES (JAN 1991)

(a) "Contract date," as used in this clause, means the date set for bid opening or, if this is a negotiated contract or a modification, the effective date of this contract or modification.

"All applicable Federal, State, and local taxes and duties," as used in this clause, means all taxes and duties, in effect on the contract date, that the taxing authority is imposing and collecting on the transactions or property covered by this contract.

"After-imposed Federal tax," as used in this clause, means any new or increased Federal excise tax or duty, or tax that was exempted or excluded on the contract date but whose exemption was later revoked or reduced during the contract period, on the transactions or property covered by this contract that the Contractor is required to pay or bear as the result of legislative, judicial, or administrative action taking effect after the contract date. It does not include social security tax or other employment taxes.

"After-relieved Federal tax," as used in this clause, means any amount of Federal excise tax or duty, except social security or other employment taxes, that would otherwise have been payable on the transactions or property covered by this contract, but which the Contractor is not required to pay or bear, or for which the Contractor obtains a refund or drawback, as the result of legislative, judicial, or administrative action taking effect after the contract date.

(b) The contract price includes all applicable Federal, State, and local taxes and duties.

(c) The contract price shall be increased by the amount of any after-imposed Federal tax, provided the Contractor warrants in writing that no amount for such newly imposed Federal excise tax or duty or rate increase was included in the contract price, as a contingency reserve or otherwise.

(d) The contract price shall be decreased by the amount of any after-relieved Federal tax.

(e) The contract price shall be decreased by the amount of any Federal excise tax or duty, except social security or other employment taxes, that the Contractor is required to pay or bear, or does not obtain a refund of, through the Contractor's fault, negligence, or failure to follow instructions of the Contracting Officer.

(f) No adjustment shall be made in the contract price under this clause unless the amount of the adjustment exceeds \$250.

(g) The Contractor shall promptly notify the Contracting Officer of all matters relating to any Federal excise tax or duty that reasonably may be expected to result in either an increase or decrease in the contract price and shall take appropriate action as the Contracting Officer directs.

(h) The Government shall, without liability, furnish evidence appropriate to establish exemption from any Federal, State, or local tax when the Contractor requests such evidence and a reasonable basis exists to sustain the exemption.

(End of clause)

52.229-5 TAXES--CONTRACTS PERFORMED IN U.S. POSSESSIONS OR PUERTO RICO (APR 1984)

The term "local taxes," as used in the Federal, State, and local taxes clause of this contract, includes taxes imposed by a possession of the United States or by Puerto Rico.

(End of clause)

52.230-2 COST ACCOUNTING STANDARDS (APR 1998)

(a) Unless the contract is exempt under 48 CFR 9903.201-1 and 9903.201-2, the provisions of 48 CFR Part 9903 are incorporated herein by reference and the Contractor, in connection with this contract, shall--

(1) (CAS-covered Contracts Only) By submission of a Disclosure Statement, disclose in writing the Contractor's cost accounting practices as required by 48 CFR 9903.202-1 through 9903.202-5, including methods of distinguishing direct costs from indirect costs and the basis used for allocating indirect costs. The practices disclosed for this contract shall be the same as the practices currently disclosed and applied on all other contracts and subcontracts being performed by the Contractor and which contain a Cost Accounting Standards (CAS) clause. If the Contractor has notified the Contracting Officer that the Disclosure Statement contains trade secrets and commercial or financial information which is privileged and confidential, the Disclosure Statement shall be protected and shall not be released outside of the Government.

(2) Follow consistently the Contractor's cost accounting practices in accumulating and reporting contract performance cost data concerning this contract. If any change in cost accounting practices is made for the purposes of any contract or subcontract subject to CAS requirements, the change must be applied prospectively to this contract and the Disclosure Statement must be amended accordingly. If the contract price or cost allowance of this contract is affected by such changes, adjustment shall be made in accordance with subparagraph (a)(4) or (a)(5) of this clause, as appropriate.

(3) Comply with all CAS, including any modifications and interpretations indicated thereto contained in 48 CFR Part 9904, in effect on the date of award of this contract or, if the Contractor has submitted cost or pricing data, on the date of final agreement on price as shown on the Contractor's signed certificate of current cost or pricing data. The Contractor shall also comply with any CAS (or modifications to CAS) which hereafter become applicable to a

contract or subcontract of the Contractor. Such compliance shall be required prospectively from the date of applicability to such contract or subcontract.

(4)(i) Agree to an equitable adjustment as provided in the Changes clause of this contract if the contract cost is affected by a change which, pursuant to subparagraph (a)(3) of this clause, the Contractor is required to make to the Contractor's established cost accounting practices.

(ii) Negotiate with the Contracting Officer to determine the terms and conditions under which a change may be made to a cost accounting practice, other than a change made under other provisions of subparagraph (a)(4) of this clause; provided that no agreement may be made under this provision that will increase costs paid by the United States.

(iii) When the parties agree to a change to a cost accounting practice, other than a change under subdivision (a)(4)(i) of this clause, negotiate an equitable adjustment as provided in the Changes clause of this contract.

(5) Agree to an adjustment of the contract price or cost allowance, as appropriate, if the Contractor or a subcontractor fails to comply with an applicable Cost Accounting Standard, or to follow any cost accounting practice consistently and such failure results in any increased costs paid by the United States. Such adjustment shall provide for recovery of the increased costs to the United States, together with interest thereon computed at the annual rate established under section 6621 of the Internal Revenue Code of 1986 (26 U.S.C. 6621) for such period, from the time the payment by the United States was made to the time the adjustment is effected. In no case shall the Government recover costs greater than the increased cost to the Government, in the aggregate, on the relevant contracts subject to the price adjustment, unless the Contractor made a change in its cost accounting practices of which it was aware or should have been aware at the time of price negotiations and which it failed to disclose to the Government.

(b) If the parties fail to agree whether the Contractor or a subcontractor has complied with an applicable CAS in 48 CFR 9904 or a CAS rule or regulation in 48 CFR 9903 and as to any cost adjustment demanded by the United States, such failure to agree will constitute a dispute under the Contract Disputes Act (41 U.S.C. 601).

(c) The Contractor shall permit any authorized representatives of the Government to examine and make copies of any documents, papers, or records relating to compliance with the requirements of this clause.

(d) The Contractor shall include in all negotiated subcontracts which the Contractor enters into, the substance of this clause, except paragraph (b), and shall require such inclusion in all other subcontracts, of any tier, including the obligation to comply with all CAS in effect on the subcontractor's award date or if the subcontractor has submitted cost or pricing data, on the date of final agreement on price as shown on the subcontractor's signed Certificate of Current Cost or Pricing Data. If the subcontract is awarded to a business unit which pursuant to 48 CFR 9903.201-2 is subject to other types of CAS coverage, the substance of the applicable clause set forth in subsection 30.201-4 of the Federal Acquisition Regulation shall be inserted. This requirement shall apply only to negotiated subcontracts in excess of \$500,000, except that the requirement shall not apply to negotiated subcontracts otherwise exempt from the requirement to include a CAS clause as specified in 48 CFR 9903.201-1.

52.230-4 CONSISTENCY IN COST ACCOUNTING PRACTICES (AUG 1992)

The Contractor agrees that it will consistently follow the cost accounting practices disclosed on Form CASB DS-1 in estimating, accumulating and reporting costs under this contract. In the event the Contractor fails to follow such practices, it agrees that the contract price shall be adjusted, together with interest, if such failure results in increased cost paid by the U.S. Government. Interest shall be computed at the annual rate of interest established under section 6621 of the Internal Revenue Code of 1986 (26 U.S.C. 6621) from the time payment by the Government was made to the time adjustment is effected. The Contractor agrees that the Disclosure Statement filed with the U.K. Ministry of Defense shall be available for inspection and use by authorized representatives of the United States Government.

52.230-6 ADMINISTRATION OF COST ACCOUNTING STANDARDS (NOV 1999)

For the purpose of administering the Cost Accounting Standards (CAS) requirements under this contract, the Contractor shall take the steps outlined in paragraphs (a) through (g) of this clause:

(a) Submit to the Contracting Officer a description of any cost accounting practice change, the total potential impact of the change on contracts containing a CAS clause, and a general dollar magnitude of the change which identifies the potential shift of costs between CAS-covered contracts by contract type (i.e., firm-fixed-price, incentive, cost-plus-fixed fee, etc.) and other contractor business activity. As related to CAS-covered contracts, the analysis should identify the potential impact on funds of the various Agencies/Departments (i.e., Department of Energy, National Aeronautics and Space Administration, Army, Navy, Air Force, other Department of Defense, other Government) as follows:

(1) For any change in cost accounting practices required in accordance with subparagraph (a)(3) and subdivision (a)(4)(i) of the clause at FAR 52.230-2, Cost Accounting Standards; or subparagraph (a)(3) and subdivisions (a)(4)(i) or (a)(4)(iv) of the clause at FAR 52.230-5, Cost Accounting Standards-Educational Institution; within 60 days (or such other date as may be mutually agreed to) after award of a contract requiring this change.

(2) For any change in cost accounting practices proposed in accordance with subdivision (a)(4)(ii) or (iii) of the clauses at FAR 52.230-2, Cost Accounting Standards, and FAR 52.230-5, Cost Accounting Standards-Educational Institution; or with subparagraph (a)(3) of the clause at FAR 52.230-3, Disclosure and Consistency of Cost Accounting Practices, not less than 60 days (or such other date as may be mutually agreed to) before the effective date of the proposed change.

(3) For any failure to comply with an applicable CAS or to follow a disclosed practice (as contemplated by subparagraph (a)(5) at FAR 52.230-2, Cost Accounting Standards, and FAR 52.230-5, Cost Accounting Standards-Educational Institution; or by subparagraph (a)(4) at FAR 52.230-3, Disclosure and Consistency of Cost Accounting Practices):

(i) Within 60 days (or such other date as may be mutually agreed to) after the date of agreement with the initial finding of noncompliance, or

(ii) In the event of Contractor disagreement with the initial finding of noncompliance, within 60 days of the date the Contractor is notified by the Contracting Officer of the determination of noncompliance.

(b) After an ACO, or cognizant Federal agency official, determination of materiality, submit a cost impact proposal in the form and manner specified by the Contracting Officer within 60 days (or such other date as may be mutually agreed to) after the date of determination of the adequacy and compliance of a change submitted pursuant to paragraph (a) of this clause. The cost impact proposal shall be in sufficient detail to permit evaluation, determination, and negotiation of the cost impact upon each separate CAS-covered contract and subcontract.

(1) Cost impact proposals submitted for changes in cost accounting practices required in accordance with subparagraph (a)(3) and subdivision (a)(4)(i) of the clause at FAR 52.230-2, Cost Accounting Standards; or subparagraph (a)(3) and subdivisions (a)(4)(i) or (a)(4)(iv) of the clause at FAR 52.230-5, Cost Accounting Standards-Educational Institution; shall identify the applicable standard or cost principle and all contracts and subcontracts containing the clauses entitled Cost Accounting Standards or Cost Accounting Standards-Educational Institution, which have an award date before the effective date of that standard or cost principle.

(2) Cost impact proposals submitted for any change in cost accounting practices proposed in accordance with subdivisions (a)(4)(ii) or (iii) of the clauses at FAR 52.230-2, Cost Accounting Standards, and FAR 52.230-5, Cost Accounting Standards-Educational Institution; or with subparagraph (a)(3) of the clause at FAR 52.230-3, Disclosure and Consistency of Cost Accounting Practices; shall identify all contracts and subcontracts containing the clauses at FAR 52.230-2, Cost Accounting Standards, FAR 52.230-5, Cost Accounting Standards-Educational Institution, and FAR 52.230-3, Disclosure and Consistency of Cost Accounting Practices.

(3) Cost impact proposals submitted for failure to comply with an applicable CAS or to follow a disclosed practice

as contemplated by subparagraph (a)(5) of the clauses at FAR 52.230-2, Cost Accounting Standards, and FAR 52.230-5, Cost Accounting Standards-Educational Institution; or by subparagraph (a)(4) of the clause at FAR 52.230-3, Disclosure and Consistency of Cost Accounting Practices, shall identify the cost impact on each separate CAS covered contract from the date of failure to comply until the noncompliance is corrected.

(c) If the submissions required by paragraphs (a) and (b) of this clause are not submitted within the specified time, or any extension granted by the Contracting Officer, an amount not to exceed 10 percent of each subsequent amount determined payable related to the Contractor's CAS-covered prime contracts, up to the estimated general dollar magnitude of the cost impact, may be withheld until such time as the required submission has been provided in the form and manner specified by the Contracting Officer.

(d) Agree to appropriate contract and subcontract amendments to reflect adjustments established in accordance with subparagraphs (a)(4) and (a)(5) of the clauses at FAR 52.230-2 and 52.230-5 or with subparagraphs (a)(3) or (a)(4) of the Disclosure and Consistency of Cost Accounting Practices clause at FAR 52.230-3.

(e) For all subcontracts subject to the clauses at FAR 52.230-2, 52.230-3, or 52.230-5--

(1) So state in the body of the subcontract, in the letter of award, or in both (self-deleting clauses shall not be used);

(2) Include the substance of this clause in all negotiated subcontracts; and

(3) Within 30 days after award of the subcontract, submit the following information to the Contractor's cognizant contract administration office for transmittal to the contract administration office cognizant of the subcontractor's facility:

(i) Subcontractor's name and subcontract number.

(ii) Dollar amount and date of award.

(iii) Name of Contractor making the award.

(f) Notify the Contracting Officer in writing of any adjustments required to subcontracts under this contract and agree to an adjustment, based on them, to this contract price or estimated cost and fee. This notice is due within 30 days after proposed subcontract adjustments are received and shall include a proposal for adjusting the higher tier subcontract or the prime contract appropriately.

(g) For subcontracts containing the clauses at FAR 52.230-2 or 52.230-5, require the subcontractor to comply with all Standards in effect on the date of award or of final agreement on price, as shown on the subcontractor's signed Certificate of Current Cost or Pricing Data, whichever is earlier.

52.232-1 PAYMENTS (APR 1984)

The Government shall pay the Contractor, upon the submission of proper invoices or vouchers, the prices stipulated in this contract for supplies delivered and accepted or services rendered and accepted, less any deductions provided in this contract. Unless otherwise specified in this contract, payment shall be made on partial deliveries accepted by the Government if--

(a) The amount due on the deliveries warrants it; or

(b) The Contractor requests it and the amount due on the deliveries is at least \$1,000 or 50 percent of the total contract price.

52.232-5 PAYMENTS UNDER FIXED-PRICE CONSTRUCTION CONTRACTS (MAY 1997)

(a) Payment of price. The Government shall pay the Contractor the contract price as provided in this contract.

(b) Progress payments. The Government shall make progress payments monthly as the work proceeds, or at more frequent intervals as determined by the Contracting Officer, on estimates of work accomplished which meets the standards of quality established under the contract, as approved by the Contracting Officer.

(1) The Contractor's request for progress payments shall include the following substantiation:

(i) An itemization of the amounts requested, related to the various elements of work required by the contract covered by the payment requested.

(ii) A listing of the amount included for work performed by each subcontractor under the contract.

(iii) A listing of the total amount of each subcontract under the contract.

(iv) A listing of the amounts previously paid to each such subcontractor under the contract.

(v) Additional supporting data in a form and detail required by the Contracting Officer.

(2) In the preparation of estimates, the Contracting Officer may authorize material delivered on the site and preparatory work done to be taken into consideration. Material delivered to the Contractor at locations other than the site also may be taken into consideration if--

(i) Consideration is specifically authorized by this contract; and

(ii) The Contractor furnishes satisfactory evidence that it has acquired title to such material and that the material will be used to perform this contract.

(c) Contractor certification. Along with each request for progress payments, the Contractor shall furnish the following certification, or payment shall not be made: (However, if the Contractor elects to delete paragraph (c)(4) from the certification, the certification is still acceptable.)

I hereby certify, to the best of my knowledge and belief, that--

(1) The amounts requested are only for performance in accordance with the specifications, terms, and conditions of the contract;

(2) Payments to subcontractors and suppliers have been made from previous payments received under the contract, and timely payments will be made from the proceeds of the payment covered by this certification, in accordance with subcontract agreements and the requirements of chapter 39 of Title 31, United States Code;

(3) This request for progress payments does not include any amounts which the prime contractor intends to withhold or retain from a subcontractor or supplier in accordance with the terms and conditions of the subcontract; and

(4) This certification is not to be construed as final acceptance of a subcontractor's performance.

(Name)

(Title)

(Date)

(d) Refund of unearned amounts. If the Contractor, after making a certified request for progress payments, discovers that a portion or all of such request constitutes a payment for performance by the Contractor that fails to conform to the specifications, terms, and conditions of this contract (hereinafter referred to as the "unearned amount"), the Contractor shall--

(1) Notify the Contracting Officer of such performance deficiency; and

(2) Be obligated to pay the Government an amount (computed by the Contracting Officer in the manner provided in paragraph (j) of this clause) equal to interest on the unearned amount from the 8th day after the date of receipt of the unearned amount until--

(i) The date the Contractor notifies the Contracting Officer that the performance deficiency has been corrected; or

(ii) The date the Contractor reduces the amount of any subsequent certified request for progress payments by an amount equal to the unearned amount.

(e) Retainage. If the Contracting Officer finds that satisfactory progress was achieved during any period for which a progress payment is to be made, the Contracting Officer shall authorize payment to be made in full. However, if satisfactory progress has not been made, the Contracting Officer may retain a maximum of 10 percent of the amount of the payment until satisfactory progress is achieved. When the work is substantially complete, the Contracting Officer may retain from previously withheld funds and future progress payments that amount the Contracting Officer considers adequate for protection of the Government and shall release to the Contractor all the remaining withheld funds. Also, on completion and acceptance of each separate building, public work, or other division of the contract, for which the price is stated separately in the contract, payment shall be made for the completed work without retention of a percentage.

(f) Title, liability, and reservation of rights. All material and work covered by progress payments made shall, at the time of payment, become the sole property of the Government, but this shall not be construed as--

(1) Relieving the Contractor from the sole responsibility for all material and work upon which payments have been made or the restoration of any damaged work; or

(2) Waiving the right of the Government to require the fulfillment of all of the terms of the contract.

(g) Reimbursement for bond premiums. In making these progress payments, the Government shall, upon request, reimburse the Contractor for the amount of premiums paid for performance and payment bonds (including coinsurance and reinsurance agreements, when applicable) after the Contractor has furnished evidence of full payment to the surety. The retainage provisions in paragraph (e) of this clause shall not apply to that portion of progress payments attributable to bond premiums.

(h) Final payment. The Government shall pay the amount due the Contractor under this contract after--

(1) Completion and acceptance of all work;

(2) Presentation of a properly executed voucher; and

(3) Presentation of release of all claims against the Government arising by virtue of this contract, other than claims, in stated amounts, that the Contractor has specifically excepted from the operation of the release. A release may also be required of the assignee if the Contractor's claim to amounts payable under this contract has been assigned under the Assignment of Claims Act of 1940 (31 U.S.C. 3727 and 41 U.S.C. 15).

(i) Limitation because of undefinitized work. Notwithstanding any provision of this contract, progress payments shall not exceed 80 percent on work accomplished on undefinitized contract actions. A "contract action" is any action resulting in a contract, as defined in FAR Subpart 2.1, including contract modifications for additional supplies or services, but not including contract modifications that are within the scope and under the terms of the contract, such as contract modifications issued pursuant to the Changes clause, or funding and other administrative changes.

(j) Interest computation on unearned amounts. In accordance with 31 U.S.C. 3903(c)(1), the amount payable under subparagraph (d)(2) of this clause shall be--

(1) Computed at the rate of average bond equivalent rates of 91-day Treasury bills auctioned at the most recent auction of such bills prior to the date the Contractor receives the unearned amount; and

(2) Deducted from the next available payment to the Contractor.

52.232-17 INTEREST (JUNE 1996)

(a) Except as otherwise provided in this contract under a Price Reduction for Defective Cost or Pricing Data clause or a Cost Accounting Standards clause, all amounts that become payable by the Contractor to the Government under this contract (net of any applicable tax credit under the Internal Revenue Code (26 U.S.C. 1481)) shall bear simple interest from the date due until paid unless paid within 30 days of becoming due. The interest rate shall be the interest rate established by the Secretary of the Treasury as provided in Section 12 of the Contract Disputes Act of 1978 (Public Law 95-563), which is applicable to the period in which the amount becomes due, as provided in paragraph (b) of this clause, and then at the rate applicable for each six-month period as fixed by the Secretary until the amount is paid. reproduce, prepare derivative works, distribute copies to the public, and (b) Amounts shall be due at the earliest of the following dates:

(1) The date fixed under this contract.

(2) The date of the first written demand for payment consistent with this contract, including any demand resulting from a default termination.

(3) The date the Government transmits to the Contractor a proposed supplemental agreement to confirm completed negotiations establishing the amount of debt.

(4) If this contract provides for revision of prices, the date of written notice to the Contractor stating the amount of refund payable in connection with a pricing proposal or a negotiated pricing agreement not confirmed by contract modification.

(c) The interest charge made under this clause may be reduced under the procedures prescribed in 32.614-2 of the Federal Acquisition Regulation in effect on the date of this contract.

52.232-23 ASSIGNMENT OF CLAIMS (JAN 1986)

(a) The Contractor, under the Assignment of Claims Act, as amended, 31 U.S.C. 3727, 41 U.S.C. 15 (hereafter referred to as "the Act"), may assign its rights to be paid amounts due or to become due as a result of the performance of this contract to a bank, trust company, or other financing institution, including any Federal lending agency. The assignee under such an assignment may thereafter further assign or reassign its right under the original assignment to any type of financing institution described in the preceding sentence.

(b) Any assignment or reassignment authorized under the Act and this clause shall cover all unpaid amounts payable under this contract, and shall not be made to more than one party, except that an assignment or reassignment may be

made to one party as agent or trustee for two or more parties participating in the financing of this contract.

(c) The Contractor shall not furnish or disclose to any assignee under this contract any classified document (including this contract) or information related to work under this contract until the Contracting Officer authorizes such action in writing.

52.232-24 PROHIBITION OF ASSIGNMENT OF CLAIMS (JAN 1986)

The assignment of claims under the Assignment of Claims Act of 1940, as amended, 31 U.S.C. 3727, 41 U.S.C. 15, is prohibited for this contract.

52.232-25 PROMPT PAYMENT (JUN 1997)

Notwithstanding any other payment clause in this contract, the Government will make invoice payments and contract financing payments under the terms and conditions specified in this clause. Payment shall be considered as being made on the day a check is dated or the date of an electronic funds transfer. Definitions of pertinent terms are set forth in section 32.902 of the Federal Acquisition Regulation. All days referred to in this clause are calendar days, unless otherwise specified. (However, see subparagraph (a)(4) of this clause concerning payments due on Saturdays, Sundays, and legal holidays.)

(a) Invoice payments. (1) Due date--(i) Except as indicated in subparagraph (a)(2) and paragraph (c) of this clause, the due date for making invoice payments by the designated payment office shall be the later of the following two events:

(A) The 30th day after the designated billing office has received a proper invoice from the Contractor (except as provided in subdivision (a)(1)(ii) of this clause).

(B) The 30th day after Government acceptance of supplies delivered or services performed by the Contractor. On a final invoice where the payment amount is subject to contract settlement actions, acceptance shall be deemed to have occurred on the effective date of the contract settlement.

(ii) If the designated billing office fails to annotate the invoice with the actual date of receipt at the time of receipt, the invoice payment due date shall be the 30th day after the date of the Contractor's invoice; provided a proper invoice is received and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.

(2) Certain food products and other payments. (i) Due dates on Contractor invoices for meat, meat food products, or fish; perishable agricultural commodities; and dairy products, edible fats or oils, and food products prepared from edible fats or oils are--

(A) For meat or meat food products, as defined in section 2(a)(3) of the Packers and Stockyard Act of 1921 (7 U.S.C. 182(3)), and as further defined in Pub. L. 98-181, including any edible fresh or frozen poultry meat, any perishable poultry meat food product, fresh eggs, and any perishable egg product, as close as possible to, but not later than, the 7th day after product delivery.

(B) For fresh or frozen fish, as defined in section 204(3) of the Fish and Seafood Promotion Act of 1986 (16 U.S.C. 4003(3)), as close as possible to, but not later than, the 7th day after product delivery.

(C) For perishable agricultural commodities, as defined in section 1(4) of the Perishable Agricultural Commodities Act of 1930 (7 U.S.C. 499a(4)), as close as possible to, but not later than, the 10th day after product delivery, unless another date is specified in the contract.

(D) For dairy products, as defined in section 111(e) of the Dairy Production Stabilization Act of 1983 (7 U.S.C.

4502(e)), edible fats or oils, and food products prepared from edible fats or oils, as close as possible to, but not later than, the 10th day after the date on which a proper invoice has been received. Liquid milk, cheese, certain processed cheese products, butter, yogurt, ice cream, mayonnaise, salad dressings, and other similar products, fall within this classification. Nothing in the Act limits this classification to refrigerated products. When questions arise regarding the proper classification of a specific product, prevailing industry practices will be followed in specifying a contract payment due date. The burden of proof that a classification of a specific product is, in fact, prevailing industry practice is upon the Contractor making the representation.

(ii) If the contract does not require submission of an invoice for payment (e.g., periodic lease payments), the due date will be as specified in the contract.

(3) Contractor's invoice. The Contractor shall prepare and submit invoices to the designated billing office specified in the contract. A proper invoice must include the items listed in subdivisions (a)(3)(i) through (a)(3)(viii) of this clause. If the invoice does not comply with these requirements, it shall be returned within 7 days after the date the designated billing office received the invoice (3 days for meat, meat food products, or fish; 5 days for perishable agricultural commodities, edible fats or oils, and food products prepared from edible fats or oils), with a statement of the reasons why it is not a proper invoice. Untimely notification will be taken into account in computing any interest penalty owed the Contractor in the manner described in subparagraph (a)(5) of this clause.

(i) Name and address of the Contractor.

(ii) Invoice date. (The Contractor is encouraged to date invoices as close as possible to the date of the mailing or transmission.)

(iii) Contract number or other authorization for supplies delivered or services performed (including order number and contract line item number).

(iv) Description, quantity, unit of measure, unit price, and extended price of supplies delivered or services performed.

(v) Shipping and payment terms (e.g., shipment number and date of shipment, prompt payment discount terms). Bill of lading number and weight of shipment will be shown for shipments on Government bills of lading.

(vi) Name and address of Contractor official to whom payment is to be sent (must be the same as that in the contract or in a proper notice of assignment).

(vii) Name (where practicable), title, phone number, and mailing address of person to be notified in the event of a defective invoice.

(viii) Any other information or documentation required by the contract (such as evidence of shipment).

(ix) While not required, the Contractor is strongly encouraged to assign an identification number to each invoice.

(4) Interest penalty. An interest penalty shall be paid automatically by the designated payment office, without request from the Contractor, if payment is not made by the due date and the conditions listed in subdivisions (a)(4)(i) through (a)(4)(iii) of this clause are met, if applicable. However, when the due date falls on a Saturday, Sunday, or legal holiday when Federal Government offices are closed and Government business is not expected to be conducted, payment may be made on the following business day without incurring a late payment interest penalty.

(i) A proper invoice was received by the designated billing office.

(ii) A receiving report or other Government documentation authorizing payment was processed, and there was no disagreement over quantity, quality, or Contractor compliance with any contract term or condition.

(iii) In the case of a final invoice for any balance of funds due the Contractor for supplies delivered or services performed, the amount was not subject to further contract settlement actions between the Government and the Contractor.

(5) Computing penalty amount. The interest penalty shall be at the rate established by the Secretary of the Treasury under section 12 of the Contract Disputes Act of 1978 (41 U.S.C. 611) that is in effect on the day after the due date, except where the interest penalty is prescribed by other governmental authority (e.g., tariffs). This rate is referred to as the "Renegotiation Board Interest Rate," and it is published in the Federal Register semiannually on or about January 1 and July 1. The interest penalty shall accrue daily on the invoice principal payment amount approved by the Government until the payment date of such approved principal amount; and will be compounded in 30-day increments inclusive from the first day after the due date through the payment date. That is, interest accrued at the end of any 30-day period will be added to the approved invoice principal payment amount and will be subject to interest penalties if not paid in the succeeding 30-day period. If the designated billing office failed to notify the Contractor of a defective invoice within the periods prescribed in subparagraph (a)(3) of this clause, the due date on the corrected invoice will be adjusted by subtracting from such date the number of days taken beyond the prescribed notification of defects period. Any interest penalty owed the Contractor will be based on this adjusted due date. Adjustments will be made by the designated payment office for errors in calculating interest penalties.

(i) For the sole purpose of computing an interest penalty that might be due the Contractor, Government acceptance shall be deemed to have occurred constructively on the 7th day (unless otherwise specified in this contract) after the Contractor delivered the supplies or performed the services in accordance with the terms and conditions of the contract, unless there is a disagreement over quantity, quality, or Contractor compliance with a contract provision. In the event that actual acceptance occurs within the constructive acceptance period, the determination of an interest penalty shall be based on the actual date of acceptance. The constructive acceptance requirement does not, however, compel Government officials to accept supplies or services, perform contract administration functions, or make payment prior to fulfilling their responsibilities.

(ii) The following periods of time will not be included in the determination of an interest penalty:

(A) The period taken to notify the Contractor of defects in invoices submitted to the Government, but this may not exceed 7 days (3 days for meat, meat food products, or fish; 5 days for perishable agricultural commodities, dairy products, edible fats or oils, and food products prepared from edible fats or oils).

(B) The period between the defects notice and resubmission of the corrected invoice by the Contractor.

(C) For incorrect electronic funds transfer (EFT) information, in accordance with the EFT clause of this contract.

(iii) Interest penalties will not continue to accrue after the filing of a claim for such penalties under the clause at 52.233-1, Disputes, or for more than 1 year. Interest penalties of less than \$1 need not be paid.

(iv) Interest penalties are not required on payment delays due to disagreement between the Government and the Contractor over the payment amount or other issues involving contract compliance or on amounts temporarily withheld or retained in accordance with the terms of the contract. Claims involving disputes, and any interest that may be payable, will be resolved in accordance with the clause at 52.233-1, Disputes.

(6) Prompt payment discounts. An interest penalty also shall be paid automatically by the designated payment office, without request from the Contractor, if a discount for prompt payment is taken improperly. The interest penalty will be calculated as described in subparagraph (a)(5) of this clause on the amount of discount taken for the period beginning with the first day after the end of the discount period through the date when the Contractor is paid.

(7) Additional interest penalty. (i) If this contract was awarded on or after October 1, 1989, a penalty amount, calculated in accordance with subdivision (a)(7)(iii) of this clause, shall be paid in addition to the interest penalty amount if the Contractor--

(A) Is owed an interest penalty of \$1 or more;

(B) Is not paid the interest penalty within 10 days after the date the invoice amount is paid; and

(C) Makes a written demand to the designated payment office for additional penalty payment, in accordance with subdivision (a)(7)(ii) of this clause, postmarked not later than 40 days after the invoice amount is paid.

(ii)(A) Contractors shall support written demands for additional penalty payments with the following data. No additional data shall be required. Contractors shall--

(1) Specifically assert that late payment interest is due under a specific invoice, and request payment of all overdue late payment interest penalty and such additional penalty as may be required;

(2) Attach a copy of the invoice on which the unpaid late payment interest was due; and

(3) State that payment of the principal has been received, including the date of receipt.

(B) Demands must be postmarked on or before the 40th day after payment was made, except that--

(1) If the postmark is illegible or nonexistent, the demand must have been received and annotated with the date of receipt by the designated payment office on or before the 40th day after payment was made; or

(2) If the postmark is illegible or nonexistent and the designated payment office fails to make the required annotation, the demand's validity will be determined by the date the Contractor has placed on the demand; provided such date is no later than the 40th day after payment was made.

(iii)(A) The additional penalty shall be equal to 100 percent of any original late payment interest penalty, except--

(1) The additional penalty shall not exceed \$5,000;

(2) The additional penalty shall never be less than \$25; and

(3) No additional penalty is owed if the amount of the underlying interest penalty is less than \$1.

(B) If the interest penalty ceases to accrue in accordance with the limits stated in subdivision (a)(5)(iii) of this clause, the amount of the additional penalty shall be calculated on the amount of interest penalty that would have accrued in the absence of these limits, subject to the overall limits on the additional penalty specified in subdivision (a)(7)(iii)(A) of this clause.

(C) For determining the maximum and minimum additional penalties, the test shall be the interest penalty due on each separate payment made for each separate contract. The maximum and minimum additional penalty shall not be based upon individual invoices unless the invoices are paid separately. Where payments are consolidated for disbursing purposes, the maximum and minimum additional penalty determination shall be made separately for each contract therein.

(D) The additional penalty does not apply to payments regulated by other Government regulations (e.g., payments under utility contracts subject to tariffs and regulation).

(b) Contract financing payments. (1) Due dates for recurring financing payments. If this contract provides for contract financing, requests for payment shall be submitted to the designated billing office as specified in this contract or as directed by the Contracting Officer. Contract financing payments shall be made on the [insert day as prescribed by Agency head; if not prescribed, insert 30th day] day after receipt of a proper contract financing request by the designated billing office. In the event that an audit or other review of a specific financing request is required to ensure compliance with the terms and conditions of the contract, the designated payment office is not compelled to make payment by the due date specified.

(2) Due dates for other contract financing. For advance payments, loans, or other arrangements that do not involve recurring submissions of contract financing requests, payment shall be made in accordance with the corresponding contract terms or as directed by the Contracting Officer.

(3) Interest penalty not applicable. Contract financing payments shall not be assessed an interest penalty for payment delays.

(c) Fast payment procedure due dates. If this contract contains the clause at 52.213-1, Fast Payment Procedure, payments will be made within 15 days after the date of receipt of the invoice.

52.232-27 PROMPT PAYMENT FOR CONSTRUCTION CONTRACTS (JUN 1997)

Notwithstanding any other payment terms in this contract, the Government will make invoice payments and contract financing payments under the terms and conditions specified in this clause. Payment shall be considered as being made on the day a check is dated or the date of an electronic funds transfer. Definitions of pertinent terms are set forth in section 32.902 of the Federal Acquisition Regulation. All days referred to in this clause are calendar days, unless otherwise specified. (However, see subparagraph (a)(3) concerning payments due on Saturdays, Sundays, and legal holidays.)

(a) Invoice payments. (1) Types of invoice payments. For purposes of this clause, there are several types of invoice payments that may occur under this contract, as follows:

(i) Progress payments, if provided for elsewhere in this contract, based on Contracting Officer approval of the estimated amount and value of work or services performed, including payments for reaching milestones in any project:

(A) The due date for making such payments shall be 14 days after receipt of the payment request by the designated billing office. If the designated billing office fails to annotate the payment request with the actual date of receipt at the time of receipt, the payment due date shall be the 14th day after the date of the Contractor's payment request, provided a proper payment request is received and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.

(B) The due date for payment of any amounts retained by the Contracting Officer in accordance with the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts, shall be as specified in the contract or, if not specified, 30 days after approval for release to the Contractor by the Contracting Officer.

(ii) Final payments based on completion and acceptance of all work and presentation of release of all claims against the Government arising by virtue of the contract, and payments for partial deliveries that have been accepted by the Government (e.g., each separate building, public work, or other division of the contract for which the price is stated separately in the contract):

(A) The due date for making such payments shall be either the 30th day after receipt by the designated billing office of a proper invoice from the Contractor, or the 30th day after Government acceptance of the work or services completed by the Contractor, whichever is later. If the designated billing office fails to annotate the invoice with the date of actual receipt at the time of receipt, the invoice payment due date shall be the 30th day after the date of the Contractor's invoice, provided a proper invoice is received and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.

(B) On a final invoice where the payment amount is subject to contract settlement actions (e.g., release of claims), acceptance shall be deemed to have occurred on the effective date of the contract settlement.

(2) Contractor's invoice. The Contractor shall prepare and submit invoices to the designated billing office specified in the contract. A proper invoice must include the items listed in subdivisions (a)(2)(i) through (a)(2)(ix) of this clause. If the invoice does not comply with these requirements, it shall be returned within 7 days after the date the designated billing office received the invoice, with a statement of the reasons why it is not a proper invoice.

Untimely notification will be taken into account in computing any interest penalty owed the Contractor in the manner described in subparagraph (a)(4) of this clause.

(i) Name and address of the Contractor.

(ii) Invoice date. (The Contractor is encouraged to date invoices as close as possible to the date of mailing or transmission.)

(iii) Contract number or other authorization for work or services performed (including order number and contract line item number).

(iv) Description of work or services performed.

(v) Delivery and payment terms (e.g., prompt payment discount terms).

(vi) Name and address of Contractor official to whom payment is to be sent (must be the same as that in the contract or in a proper notice of assignment).

(vii) Name (where practicable), title, phone number, and mailing address of person to be notified in the event of a defective invoice.

(viii) For payments described in subdivision (a)(1)(i) of this clause, substantiation of the amounts requested and certification in accordance with the requirements of the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts.

(ix) Any other information or documentation required by the contract.

(x) While not required, the Contractor is strongly encouraged to assign an identification number to each invoice.

(3) Interest penalty. An interest penalty shall be paid automatically by the designated payment office, without request from the Contractor, if payment is not made by the due date and the conditions listed in subdivisions (a)(3)(i) through (a)(3)(iii) of this clause are met, if applicable. However, when the due date falls on a Saturday, Sunday, or legal holiday when Federal Government offices are closed and Government business is not expected to be conducted, payment may be made on the following business day without incurring a late payment interest penalty.

(i) A proper invoice was received by the designated billing office.

(ii) A receiving report or other Government documentation authorizing payment was processed and there was no disagreement over quantity, quality, Contractor compliance with any contract term or condition, or requested progress payment amount.

(iii) In the case of a final invoice for any balance of funds due the Contractor for work or services performed, the amount was not subject to further contract settlement actions between the Government and the Contractor.

(4) Computing penalty amount. The interest penalty shall be at the rate established by the Secretary of the Treasury under section 12 of the Contract Disputes Act of 1978 (41 U.S.C. 611) that is in effect on the day after the due date, except where the interest penalty is prescribed by other governmental authority (e.g., tariffs). This rate is referred to as the "Renegotiation Board Interest Rate," and it is published in the Federal Register semiannually on or about January 1 and July 1. The interest penalty shall accrue daily on the invoice principal payment amount approved by the Government until the payment date of such approved principal amount; and will be compounded in 30-day increments inclusive from the first day after the due date through the payment date. That is, interest accrued at the end of any 30-day period will be added to the approved invoice principal payment amount and will be subject to interest penalties if not paid in the succeeding 30-day period. If the designated billing office failed to notify the Contractor of a defective invoice within the periods prescribed in subparagraph (a)(2) of this clause, the due date on

the corrected invoice will be adjusted by subtracting from such date the number of days taken beyond the prescribed notification of defects period. Any interest penalty owed the Contractor will be based on this adjusted due date. Adjustments will be made by the designated payment office for errors in calculating interest penalties.

(i) For the sole purpose of computing an interest penalty that might be due the Contractor for payments described in subdivision (a)(1)(ii) of this clause, Government acceptance or approval shall be deemed to have occurred constructively on the 7th day after the Contractor has completed the work or services in accordance with the terms and conditions of the contract. In the event that actual acceptance or approval occurs within the constructive acceptance or approval period, the determination of an interest penalty shall be based on the actual date of acceptance or approval. Constructive acceptance or constructive approval requirements do not apply if there is a disagreement over quantity, quality, or Contractor compliance with a contract provision. These requirements also do not compel Government officials to accept work or services, approve Contractor estimates, perform contract administration functions, or make payment prior to fulfilling their responsibilities.

(ii) The following periods of time will not be included in the determination of an interest penalty:

(A) The period taken to notify the Contractor of defects in invoices submitted to the Government, but this may not exceed 7 days.

(B) The period between the defects notice and resubmission of the corrected invoice by the Contractor.

(C) For incorrect electronic funds transfer (EFT) information, in accordance with the EFT clause of this contract.

(iii) Interest penalties will not continue to accrue after the filing of a claim for such penalties under the clause at 52.233-1, Disputes, or for more than 1 year. Interest penalties of less than \$1 need not be paid.

(iv) Interest penalties are not required on payment delays due to disagreement between the Government and the Contractor over the payment amount or other issues involving contract compliance, or on amounts temporarily withheld or retained in accordance with the terms of the contract. Claims involving disputes, and any interest that may be payable, will be resolved in accordance with the clause at 52.233-1, Disputes.

(5) Prompt payment discounts. An interest penalty also shall be paid automatically by the designated payment office, without request from the Contractor, if a discount for prompt payment is taken improperly. The interest penalty will be calculated on the amount of discount taken for the period beginning with the first day after the end of the discount period through the date when the Contractor is paid.

(6) Additional interest penalty. (i) If this contract was awarded on or after October 1, 1989, a penalty amount, calculated in accordance with subdivision (a)(6)(iii) of this clause, shall be paid in addition to the interest penalty amount if the Contractor--

(A) Is owed an interest penalty of \$1 or more;

(B) Is not paid the interest penalty within 10 days after the date the invoice amount is paid; and

(C) Makes a written demand to the designated payment office for additional penalty payment, in accordance with subdivision (a)(6)(ii) of this clause, postmarked not later than 40 days after the date the invoice amount is paid.

(ii)(A) Contractors shall support written demands for additional penalty payments with the following data. No additional data shall be required. Contractors shall--

(1) Specifically assert that late payment interest is due under a specific invoice, and request payment of all overdue late payment interest penalty and such additional penalty as may be required;

(2) Attach a copy of the invoice on which the unpaid late payment interest was due; and

(3) State that payment of the principal has been received, including the date of receipt.

(B) Demands must be postmarked on or before the 40th day after payment was made, except that--

(1) If the postmark is illegible or nonexistent, the demand must have been received and annotated with the date of receipt by the designated payment office on or before the 40th day after payment was made; or

(2) If the postmark is illegible or nonexistent and the designated payment office fails to make the required annotation, the demand's validity will be determined by the date the Contractor has placed on the demand; provided such date is no later than the 40th day after payment was made.

(iii)(A) The additional penalty shall be equal to 100 percent of any original late payment interest penalty, except--

(1) The additional penalty shall not exceed \$5,000;

(2) The additional penalty shall never be less than \$25; and

(3) No additional penalty is owed if the amount of the underlying interest penalty is less than \$1.

(B) If the interest penalty ceases to accrue in accordance with the limits stated in subdivision (a)(4)(iii) of this clause, the amount of the additional penalty shall be calculated on the amount of interest penalty that would have accrued in the absence of these limits, subject to the overall limits on the additional penalty specified in subdivision (a)(6)(iii)(A) of this clause.

(C) For determining the maximum and minimum additional penalties, the test shall be the interest penalty due on each separate payment made for each separate contract. The maximum and minimum additional penalty shall not be based upon individual invoices unless the invoices are paid separately. Where payments are consolidated for disbursing purposes, the maximum and minimum additional penalty determination shall be made separately for each contract therein.

(D) The additional penalty does not apply to payments regulated by other Government regulations (e.g., payments under utility contracts subject to tariffs and regulation).

(b) Contract financing payments. (1) Due dates for recurring financing payments. If this contract provides for contract financing, requests for payment shall be submitted to the designated billing office as specified in this contract or as directed by the Contracting Officer. Contract financing payments shall be made on the [insert day as prescribed by Agency head; if not prescribed, insert 30th day] day after receipt of a proper contract financing request by the designated billing office. In the event that an audit or other review of a specific financing request is required to ensure compliance with the terms and conditions of the contract, the designated payment office is not compelled to make payment by the due date specified.

(2) Due dates for other contract financing. For advance payments, loans, or other arrangements that do not involve recurring submissions of contract financing requests, payment shall be made in accordance with the corresponding contract terms or as directed by the Contracting Officer.

(3) Interest penalty not applicable. Contract financing payments shall not be assessed an interest penalty for payment delays.

(c) Subcontract clause requirements. The Contractor shall include in each subcontract for property or services (including a material supplier) for the purpose of performing this contract the following:

(1) Prompt payment for subcontractors. A payment clause that obligates the Contractor to pay the subcontractor for satisfactory performance under its subcontract not later than 7 days from receipt of payment out of such amounts as are paid to the Contractor under this contract.

(2) Interest for subcontractors. An interest penalty clause that obligates the Contractor to pay to the subcontractor an interest penalty for each payment not made in accordance with the payment clause--

(i) For the period beginning on the day after the required payment date and ending on the date on which payment of the amount due is made; and

(ii) Computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under section 12 of the Contract Disputes Act of 1978 (41 U.S.C. 611) in effect at the time the Contractor accrues the obligation to pay an interest penalty.

(3) Subcontractor clause flowdown. A clause requiring each subcontractor to include a payment clause and an interest penalty clause conforming to the standards set forth in subparagraphs (c)(1) and (c)(2) of this clause in each of its subcontracts, and to require each of its subcontractors to include such clauses in their subcontracts with each lower-tier subcontractor or supplier.

(d) Subcontract clause interpretation. The clauses required by paragraph (c) of this clause shall not be construed to impair the right of the Contractor or a subcontractor at any tier to negotiate, and to include in their subcontract, provisions that--

(1) Retainage permitted. Permit the Contractor or a subcontractor to retain (without cause) a specified percentage of each progress payment otherwise due to a subcontractor for satisfactory performance under the subcontract without incurring any obligation to pay a late payment interest penalty, in accordance with terms and conditions agreed to by the parties to the subcontract, giving such recognition as the parties deem appropriate to the ability of a subcontractor to furnish a performance bond and a payment bond;

(2) Withholding permitted. Permit the Contractor or subcontractor to make a determination that part or all of the subcontractor's request for payment may be withheld in accordance with the subcontract agreement; and

(3) Withholding requirements. Permit such withholding without incurring any obligation to pay a late payment penalty if--

(i) A notice conforming to the standards of paragraph (g) of this clause previously has been furnished to the subcontractor; and

(ii) A copy of any notice issued by a Contractor pursuant to subdivision (d)(3)(i) of this clause has been furnished to the Contracting Officer.

(e) Subcontractor withholding procedures. If a Contractor, after making a request for payment to the Government but before making a payment to a subcontractor for the subcontractor's performance covered by the payment request, discovers that all or a portion of the payment otherwise due such subcontractor is subject to withholding from the subcontractor in accordance with the subcontract agreement, then the Contractor shall--

(1) Subcontractor notice. Furnish to the subcontractor a notice conforming to the standards of paragraph (g) of this clause as soon as practicable upon ascertaining the cause giving rise to a withholding, but prior to the due date for subcontractor payment;

(2) Contracting Officer notice. Furnish to the Contracting Officer, as soon as practicable, a copy of the notice furnished to the subcontractor pursuant to subparagraph (e)(1) of this clause;

(3) Subcontractor progress payment reduction. Reduce the subcontractor's progress payment by an amount not to exceed the amount specified in the notice of withholding furnished under subparagraph (e)(1) of this clause;

(4) Subsequent subcontractor payment. Pay the subcontractor as soon as practicable after the correction of the identified subcontract performance deficiency, and--

(i) Make such payment within--

(A) Seven days after correction of the identified subcontract performance deficiency (unless the funds therefor must be recovered from the Government because of a reduction under subdivision (e)(5)(i)) of this clause; or

(B) Seven days after the Contractor recovers such funds from the Government; or

(ii) Incur an obligation to pay a late payment interest penalty computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under section 12 of the Contracts Disputes Act of 1978 (41 U.S.C. 611) in effect at the time the Contractor accrues the obligation to pay an interest penalty;

(5) Notice to Contracting Officer. Notify the Contracting Officer upon--

(i) Reduction of the amount of any subsequent certified application for payment; or

(ii) Payment to the subcontractor of any withheld amounts of a progress payment, specifying--

(A) The amounts withheld under subparagraph (e)(1) of this clause; and

(B) The dates that such withholding began and ended; and

(6) Interest to Government. Be obligated to pay to the Government an amount equal to interest on the withheld payments (computed in the manner provided in 31 U.S.C. 3903(c)(1)), from the 8th day after receipt of the withheld amounts from the Government until--

(i) The day the identified subcontractor performance deficiency is corrected; or

(ii) The date that any subsequent payment is reduced under subdivision (e)(5)(i) of this clause.

(f) Third-party deficiency reports. (1) Withholding from subcontractor. If a Contractor, after making payment to a first-tier subcontractor, receives from a supplier or subcontractor of the first-tier subcontractor (hereafter referred to as a "second-tier subcontractor") a written notice in accordance with section 2 of the Act of August 24, 1935 (40 U.S.C. 270b, Miller Act), asserting a deficiency in such first-tier subcontractor's performance under the contract for which the Contractor may be ultimately liable, and the Contractor determines that all or a portion of future payments otherwise due such first-tier subcontractor is subject to withholding in accordance with the subcontract agreement, the Contractor may, without incurring an obligation to pay an interest penalty under subparagraph (e)(6) of this clause--

(i) Furnish to the first-tier subcontractor a notice conforming to the standards of paragraph (g) of this clause as soon as practicable upon making such determination; and

(ii) Withhold from the first-tier subcontractor's next available progress payment or payments an amount not to exceed the amount specified in the notice of withholding furnished under subdivision (f)(1)(i) of this clause.

(2) Subsequent payment or interest charge. As soon as practicable, but not later than 7 days after receipt of satisfactory written notification that the identified subcontract performance deficiency has been corrected, the Contractor shall--

(i) Pay the amount withheld under subdivision (f)(1)(ii) of this clause to such first-tier subcontractor; or

(ii) Incur an obligation to pay a late payment interest penalty to such first-tier subcontractor computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under section 12 of the Contracts Disputes Act of 1978 (41 U.S.C. 611) in effect at the time the Contractor accrues the obligation to pay an interest penalty.

(g) Written notice of subcontractor withholding. A written notice of any withholding shall be issued to a subcontractor (with a copy to the Contracting Officer of any such notice issued by the Contractor), specifying--

- (1) The amount to be withheld;
- (2) The specific causes for the withholding under the terms of the subcontract; and
- (3) The remedial actions to be taken by the subcontractor in order to receive payment of the amounts withheld.

(h) Subcontractor payment entitlement. The Contractor may not request payment from the Government of any amount withheld or retained in accordance with paragraph (d) of this clause until such time as the Contractor has determined and certified to the Contracting Officer that the subcontractor is entitled to the payment of such amount.

(i) Prime-subcontractor disputes. A dispute between the Contractor and subcontractor relating to the amount or entitlement of a subcontractor to a payment or a late payment interest penalty under a clause included in the subcontract pursuant to paragraph (c) of this clause does not constitute a dispute to which the United States is a party. The United States may not be interpleaded in any judicial or administrative proceeding involving such a dispute.

(j) Preservation of prime-subcontractor rights. Except as provided in paragraph (i) of this clause, this clause shall not limit or impair any contractual, administrative, or judicial remedies otherwise available to the Contractor or a subcontractor in the event of a dispute involving late payment or nonpayment by the Contractor or deficient subcontract performance or nonperformance by a subcontractor.

(k) Non-recourse for prime contractor interest penalty. The Contractor's obligation to pay an interest penalty to a subcontractor pursuant to the clauses included in a subcontract under paragraph (c) of this clause shall not be construed to be an obligation of the United States for such interest penalty. A cost-reimbursement claim may not include any amount for reimbursement of such interest penalty.

52.233-1 DISPUTES. (DEC 1998)

(a) This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. 601-613).

(b) Except as provided in the Act, all disputes arising under or relating to this contract shall be resolved under this clause.

(c) "Claim," as used in this clause, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to this contract. A claim arising under a contract, unlike a claim relating to that contract, is a claim that can be resolved under a contract clause that provides for the relief sought by the claimant. However, a written demand or written assertion by the Contractor seeking the payment of money exceeding \$100,000 is not a claim under the Act until certified as required by subparagraph (d)(2) of this clause. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim under the Act. The submission may be converted to a claim under the Act, by complying with the submission and certification requirements of this clause, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.

(d)(1) A claim by the Contractor shall be made in writing and, unless otherwise stated in this contract, submitted within 6 years after accrual of the claim to the Contracting Officer for a written decision. A claim by the Government against the Contractor shall be subject to a written decision by the Contracting Officer.

(2)(i) The contractors shall provide the certification specified in subparagraph (d)(2)(iii) of this clause when submitting any claim -

(A) Exceeding \$100,000; or

(B) Regardless of the amount claimed, when using -

(1) Arbitration conducted pursuant to 5 U.S.C. 575-580; or

(2) Any other alternative means of dispute resolution (ADR) technique that the agency elects to handle in accordance with the Administrative Dispute Resolution Act (ADRA).

(ii) The certification requirement does not apply to issues in controversy that have not been submitted as all or part of a claim.

(iii) The certification shall state as follows: "I certify that the claim is made in good faith; that the supporting data are accurate and complete to the best of my knowledge and belief; that the amount requested accurately reflects the contract adjustment for which the Contractor believes the Government is liable; and that I am duly authorized to certify the claim on behalf of the Contractor.

(3) The certification may be executed by any person duly authorized to bind the Contractor with respect to the claim.

(e) For Contractor claims of \$100,000 or less, the Contracting Officer must, if requested in writing by the Contractor, render a decision within 60 days of the request. For Contractor-certified claims over \$100,000, the Contracting Officer must, within 60 days, decide the claim or notify the Contractor of the date by which the decision will be made.

(f) The Contracting Officer's decision shall be final unless the Contractor appeals or files a suit as provided in the Act.

(g) If the claim by the Contractor is submitted to the Contracting Officer or a claim by the Government is presented to the Contractor, the parties, by mutual consent, may agree to use alternative dispute resolution (ADR). If the Contractor refuses an offer for ADR, the Contractor shall inform the Contracting Officer, in writing, of the Contractor's specific reasons for rejecting the request.

(h) The Government shall pay interest on the amount found due and unpaid from (1) the date the Contracting Officer receives the claim (certified, if required); or (2) the date that payment otherwise would be due, if that date is later, until the date of payment. With regard to claims having defective certifications, as defined in (FAR) 48 CFR 33.201, interest shall be paid from the date that the Contracting Officer initially receives the claim. Simple interest on claims shall be paid at the rate, fixed by the Secretary of the Treasury as provided in the Act, which is applicable to the period during which the Contracting Officer receives the claim and then at the rate applicable for each 6-month period as fixed by the Treasury Secretary during the pendency of the claim.

(i) The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under the contract, and comply with any decision of the Contracting Officer.

(End of clause)

52.233-3 PROTEST AFTER AWARD (AUG. 1996)

(a) Upon receipt of a notice of protest (as defined in FAR 33.101) or a determination that a protest is likely (see FAR 33.102(d)), the Contracting Officer may, by written order to the Contractor, direct the Contractor to stop performance of the work called for by this contract. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Upon receipt of the final decision in the protest, the Contracting Officer shall either--

(1) Cancel the stop-work order; or

(2) Terminate the work covered by the order as provided in the Default, or the Termination for Convenience of the Government, clause of this contract.

(b) If a stop-work order issued under this clause is canceled either before or after a final decision in the protest, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule or contract price, or both, and the contract shall be modified, in writing, accordingly, if--

(1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and

(2) The Contractor asserts its right to an adjustment within 30 days after the end of the period of work stoppage; provided, that if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon a proposal at any time before final payment under this contract.

(c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.

(d) If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

(e) The Government's rights to terminate this contract at any time are not affected by action taken under this clause.

(f) If, as the result of the Contractor's intentional or negligent misstatement, misrepresentation, or miscertification, a protest related to this contract is sustained, and the Government pays costs, as provided in FAR 33.102(b)(2) or 33.104(h)(1), the Government may require the Contractor to reimburse the Government the amount of such costs. In addition to any other remedy available, and pursuant to the requirements of Subpart 32.6, the Government may collect this debt by offsetting the amount against any payment due the Contractor under any contract between the Contractor and the Government.

52.236-4 PHYSICAL DATA (APR 1984)

Data and information furnished or referred to below is for the Contractor's information. The Government shall not be responsible for any interpretation of or conclusion drawn from the data or information by the Contractor.

(a) The indications of physical conditions on the drawings and in the specifications are the result of site investigations by [insert a description of investigational methods used, such as surveys, auger borings, core borings, test pits, probings, test tunnels].

(b) Weather conditions [insert a summary of weather records and warnings].

(c) Transportation facilities [insert a summary of transportation facilities providing access from the site, including information about their availability and limitations].

(d) [insert other pertinent information].

52.236-5 MATERIAL AND WORKMANSHIP (APR 1984)

(a) All equipment, material, and articles incorporated into the work covered by this contract shall be new and of the most suitable grade for the purpose intended, unless otherwise specifically provided in this contract. References in

the specifications to equipment, material, articles, or patented processes by trade name, make, or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition. The Contractor may, at its option, use any equipment, material, article, or process that, in the judgment of the Contracting Officer, is equal to that named in the specifications, unless otherwise specifically provided in this contract.

(b) The Contractor shall obtain the Contracting Officer's approval of the machinery and mechanical and other equipment to be incorporated into the work. When requesting approval, the Contractor shall furnish to the Contracting Officer the name of the manufacturer, the model number, and other information concerning the performance, capacity, nature, and rating of the machinery and mechanical and other equipment. When required by this contract or by the Contracting Officer, the Contractor shall also obtain the Contracting Officer's approval of the material or articles which the Contractor contemplates incorporating into the work. When requesting approval, the Contractor shall provide full information concerning the material or articles. When directed to do so, the Contractor shall submit samples for approval at the Contractor's expense, with all shipping charges prepaid. Machinery, equipment, material, and articles that do not have the required approval shall be installed or used at the risk of subsequent rejection.

(c) All work under this contract shall be performed in a skillful and workmanlike manner. The Contracting Officer may require, in writing, that the Contractor remove from the work any employee the Contracting Officer deems incompetent, careless, or otherwise objectionable.

52.236-6 SUPERINTENDENCE BY THE CONTRACTOR (APR 1984)

At all times during performance of this contract and until the work is completed and accepted, the Contractor shall directly superintend the work or assign and have on the worksite a competent superintendent who is satisfactory to the Contracting Officer and has authority to act for the Contractor.

52.236-7 PERMITS AND RESPONSIBILITIES (NOV 1991)

The Contractor shall, without additional expense to the Government, be responsible for obtaining any necessary licenses and permits, and for complying with any Federal, State, and municipal laws, codes, and regulations applicable to the performance of the work. The Contractor shall also be responsible for all damages to persons or property that occur as a result of the Contractor's fault or negligence. The Contractor shall also be responsible for all materials delivered and work performed until completion and acceptance of the entire work, except for any completed unit of work which may have been accepted under the contract.

52.236-8 OTHER CONTRACTS (APR 1984)

The Government may undertake or award other contracts for additional work at or near the site of the work under this contract. The Contractor shall fully cooperate with the other contractors and with Government employees and shall carefully adapt scheduling and performing the work under this contract to accommodate the additional work, heeding any direction that may be provided by the Contracting Officer. The Contractor shall not commit or permit any act that will interfere with the performance of work by any other contractor or by Government employees.

52.236-9 PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS (APR 1984)

(a) The Contractor shall preserve and protect all structures, equipment, and vegetation (such as trees, shrubs, and grass) on or adjacent to the work site, which are not to be removed and which do not unreasonably interfere with the work required under this contract. The Contractor shall only remove trees when specifically authorized to do so, and shall avoid damaging vegetation that will remain in place. If any limbs or branches of trees are broken during

contract performance, or by the careless operation of equipment, or by workmen, the Contractor shall trim those limbs or branches with a clean cut and paint the cut with a tree-pruning compound as directed by the Contracting Officer.

(b) The Contractor shall protect from damage all existing improvements and utilities

(1) at or near the work site, and

(2) on adjacent property of a third party, the locations of which are made known to or should be known by the Contractor. The Contractor shall repair any damage to those facilities, including those that are the property of a third party, resulting from failure to comply with the requirements of this contract or failure to exercise reasonable care in performing the work. If the Contractor fails or refuses to repair the damage promptly, the Contracting Officer may have the necessary work performed and charge the cost to the Contractor.

52.236-10 OPERATIONS AND STORAGE AREAS (APR 1984)

(a) The Contractor shall confine all operations (including storage of materials) on Government premises to areas authorized or approved by the Contracting Officer. The Contractor shall hold and save the Government, its officers and agents, free and harmless from liability of any nature occasioned by the Contractor's performance.

(b) Temporary buildings (e.g., storage sheds, shops, offices) and utilities may be erected by the Contractor only with the approval of the Contracting Officer and shall be built with labor and materials furnished by the Contractor without expense to the Government. The temporary buildings and utilities shall remain the property of the Contractor and shall be removed by the Contractor at its expense upon completion of the work. With the written consent of the Contracting Officer, the buildings and utilities may be abandoned and need not be removed.

(c) The Contractor shall, under regulations prescribed by the Contracting Officer, use only established roadways, or use temporary roadways constructed by the Contractor when and as authorized by the Contracting Officer. When materials are transported in prosecuting the work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by any Federal, State, or local law or regulation. When it is necessary to cross curbs or sidewalks, the Contractor shall protect them from damage. The Contractor shall repair or pay for the repair of any damaged curbs, sidewalks, or roads.

52.236-11 USE AND POSSESSION PRIOR TO COMPLETION (APR 1984)

(a) The Government shall have the right to take possession of or use any completed or partially completed part of the work. Before taking possession of or using any work, the Contracting Officer shall furnish the Contractor a list of items of work remaining to be performed or corrected on those portions of the work that the Government intends to take possession of or use. However, failure of the Contracting Officer to list any item of work shall not relieve the Contractor of responsibility for complying with the terms of the contract. The Government's possession or use shall not be deemed an acceptance of any work under the contract.

(b) While the Government has such possession or use, the Contractor shall be relieved of the responsibility for the loss of or damage to the work resulting from the Government's possession or use, notwithstanding the terms of the clause in this contract entitled "Permits and Responsibilities." If prior possession or use by the Government delays the progress of the work or causes additional expense to the Contractor, an equitable adjustment shall be made in the contract price or the time of completion, and the contract shall be modified in writing accordingly.

52.236-12 CLEANING UP (APR 1984)

The Contractor shall at all times keep the work area, including storage areas, free from accumulations of waste materials. Before completing the work, the Contractor shall remove from the work and premises any rubbish, tools,

scaffolding, equipment, and materials that are not the property of the Government. Upon completing the work, the Contractor shall leave the work area in a clean, neat, and orderly condition satisfactory to the Contracting Officer.

52.236-13 ACCIDENT PREVENTION (NOV 1991)

(a) The Contractor shall provide and maintain work environments and procedures which will

(1) safeguard the public and Government personnel, property, materials, supplies, and equipment exposed to Contractor operations and activities;

(2) avoid interruptions of Government operations and delays in project completion dates; and

(3) control costs in the performance of this contract.

(b) For these purposes on contracts for construction or dismantling, demolition, or removal of improvements, the Contractor shall-

(1) Provide appropriate safety barricades, signs, and signal lights;

(2) Comply with the standards issued by the Secretary of Labor at 29 CFR Part 1926 and 29 CFR Part 1910; and

(3) Ensure that any additional measures the Contracting Officer determines to be reasonably necessary for the purposes are taken.

(c) If this contract is for construction or dismantling, demolition or removal of improvements with any Department of Defense agency or component, the Contractor shall comply with all pertinent provisions of the latest version of U.S. Army Corps of Engineers Safety and Health Requirements Manual, EM 385-1-1, in effect on the date of the solicitation.

(d) Whenever the Contracting Officer becomes aware of any noncompliance with these requirements or any condition which poses a serious or imminent danger to the health or safety of the public or Government personnel, the Contracting Officer shall notify the Contractor orally, with written confirmation, and request immediate initiation of corrective action. This notice, when delivered to the Contractor or the Contractor's representative at the work site, shall be deemed sufficient notice of the noncompliance and that corrective action is required. After receiving the notice, the Contractor shall immediately take corrective action. If the Contractor fails or refuses to promptly take corrective action, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. The Contractor shall not be entitled to any equitable adjustment of the contract price or extension of the performance schedule on any stop work order issued under this clause.

(e) The Contractor shall insert this clause, including this paragraph (e), with appropriate changes in the designation of the parties, in subcontracts.

52.236-14 AVAILABILITY AND USE OF UTILITY SERVICES (APR 1984)

(a) The Government shall make all reasonably required amounts of utilities available to the Contractor from existing outlets and supplies, as specified in the contract. Unless otherwise provided in the contract, the amount of each utility service consumed shall be charged to or paid for by the Contractor at prevailing rates charged to the Government or, where the utility is produced by the Government, at reasonable rates determined by the Contracting Officer. The Contractor shall carefully conserve any utilities furnished without charge.

(b) The Contractor, at its expense and in a workmanlike manner satisfactory to the Contracting Officer, shall install and maintain all necessary temporary connections and distribution lines, and all meters required to measure the amount of each utility used for the purpose of determining charges. Before final acceptance of the work by the

Government, the Contractor shall remove all the temporary connections, distribution lines, meters, and associated paraphernalia.

52.236-15 SCHEDULES FOR CONSTRUCTION CONTRACTS (APR 1984)

(a) The Contractor shall, within five days after the work commences on the contract or another period of time determined by the Contracting Officer, prepare and submit to the Contracting Officer for approval three copies of a practicable schedule showing the order in which the Contractor proposes to perform the work, and the dates on which the Contractor contemplates starting and completing the several salient features of the work (including acquiring materials, plant, and equipment). The schedule shall be in the form of a progress chart of suitable scale to indicate appropriately the percentage of work scheduled for completion by any given date during the period. If the Contractor fails to submit a schedule within the time prescribed, the Contracting Officer may withhold approval of progress payments until the Contractor submits the required schedule.

(b) The Contractor shall enter the actual progress on the chart as directed by the Contracting Officer, and upon doing so shall immediately deliver three copies of the annotated schedule to the Contracting Officer. If, in the opinion of the Contracting Officer, the Contractor falls behind the approved schedule, the Contractor shall take steps necessary to improve its progress, including those that may be required by the Contracting Officer, without additional cost to the Government. In this circumstance, the Contracting Officer may require the Contractor to increase the number of shifts, overtime operations, days of work, and/or the amount of construction plant, and to submit for approval any supplementary schedule or schedules in chart form as the Contracting Officer deems necessary to demonstrate how the approved rate of progress will be regained.

(c) Failure of the Contractor to comply with the requirements of the Contracting Officer under this clause shall be grounds for a determination by the Contracting Officer that the Contractor is not prosecuting the work with sufficient diligence to ensure completion within the time specified in the contract. Upon making this determination, the Contracting Officer may terminate the Contractor's right to proceed with the work, or any separable part of it, in accordance with the default terms of this contract.

52.237-2 PROTECTION OF GOVERNMENT BUILDINGS, EQUIPMENT, AND VEGETATION (APR 1984)

The Contractor shall use reasonable care to avoid damaging existing buildings, equipment, and vegetation on the Government installation. If the Contractor's failure to use reasonable care causes damage to any of this property, the Contractor shall replace or repair the damage at no expense to the Government as the Contracting Officer directs. If the Contractor fails or refuses to make such repair or replacement, the Contractor shall be liable for the cost, which may be deducted from the contract price.

52.242-2 PRODUCTION PROGRESS REPORTS (APR 1991)

(a) The Contractor shall prepare and submit to the Contracting Officer the production progress reports specified in the contract Schedule.

(b) During any delay in furnishing a production progress report required under this contract, the Contracting Officer may withhold from payment an amount not exceeding \$25,000 or 5 percent of the amount of this contract, whichever is less.

52.242-13 BANKRUPTCY (JUL 1995)

In the event the Contractor enters into proceedings relating to bankruptcy, whether voluntary or involuntary, the Contractor agrees to furnish, by certified mail or electronic commerce method authorized by the contract, written

notification of the bankruptcy to the Contracting Officer responsible for administering the contract. This notification shall be furnished within five days of the initiation of the proceedings relating to bankruptcy filing. This notification shall include the date on which the bankruptcy petition was filed, the identity of the court in which the bankruptcy petition was filed, and a listing of Government contract numbers and contracting offices for all Government contracts against which final payment has not been made. This obligation remains in effect until final payment under this contract.

(End of clause)

52.242-15 STOP-WORK ORDER (AUG 1989)

(a) The Contracting Officer may, at any time, by written order to the Contractor, require the Contractor to stop all, or any part, of the work called for by this contract for a period of 90 days after the order is delivered to the Contractor, and for any further period to which the parties may agree. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Within a period of 90 days after a stop-work is delivered to the Contractor, or within any extension of that period to which the parties shall have agreed, the Contracting Officer shall either--

(1) Cancel the stop-work order; or

(2) Terminate the work covered by the order as provided in the Default, or the Termination for Convenience of the Government, clause of this contract.

(b) If a stop-work order issued under this clause is canceled or the period of the order or any extension thereof expires, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule or contract price, or both, and the contract shall be modified, in writing, accordingly, if--

(1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and

(2) The Contractor asserts its right to the adjustment within 30 days after the end of the period of work stoppage; provided, that, if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon the claim submitted at any time before final payment under this contract.

(c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.

(d) If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

52.243-1 CHANGES--FIXED-PRICE (AUG 1987) - ALTERNATE II (APR 1984)

(a) The Contracting Officer may at any time, by written order, and without notice to the sureties, if any, make changes within the general scope of this contract in any one or more of the following:

(1) Description of services to be performed.

(2) Time of performance (i.e., hours of the day, days of the week, etc.).

(3) Place of performance of the services.

(4) Drawings, designs, or specifications when the supplies to be furnished are to be specially manufactured for the Government, in accordance with the drawings, designs, or specifications.

(b) If any such change causes an increase or decrease in the cost of, or the time required for, performance of any part of the work under this contract, whether or not changed by the order, the Contracting Officer shall make an equitable adjustment in the contract price, the delivery schedule, or both, and shall modify the contract.

(c) The Contractor must assert its right to an adjustment under this clause within 30 days from the date of receipt of the written order. However, if the Contracting Officer decides that the facts justify it, the Contracting Officer may receive and act upon a proposal submitted before final payment of the contract.

(d) If the Contractor's proposal includes the cost of property made obsolete or excess by the change, the Contracting Officer shall have the right to prescribe the manner of the disposition of the property.

(e) Failure to agree to any adjustment shall be a dispute under the Disputes clause. However, nothing in this clause shall excuse the Contractor from proceeding with the contract as changed.

52.243-4 CHANGES (AUG 1987)

(a) The Contracting Officer may, at any time, without notice to the sureties, if any, by written order designated or indicated to be a change order, make changes in the work within the general scope of the contract, including changes--

(1) In the specifications (including drawings and designs);

(2) In the method or manner of performance of the work;

(3) In the Government-furnished facilities, equipment, materials, services, or site; or

(4) Directing acceleration in the performance of the work.

(b) Any other written or oral order (which, as used in this paragraph (b), includes direction, instruction, interpretation, or determination) from the Contracting Officer that causes a change shall be treated as a change order under this clause; provided, that the Contractor gives the Contracting Officer written notice stating

(1) the date, circumstances, and source of the order and

(2) that the Contractor regards the order as a change order.

(c) Except as provided in this clause, no order, statement, or conduct of the Contracting Officer shall be treated as a change under this clause or entitle the Contractor to an equitable adjustment.

(d) If any change under this clause causes an increase or decrease in the Contractor's cost of, or the time required for, the performance of any part of the work under this contract, whether or not changed by any such order, the Contracting Officer shall make an equitable adjustment and modify the contract in writing. However, except for an adjustment based on defective specifications, no adjustment for any change under paragraph (b) of this clause shall be made for any costs incurred more than 20 days before the Contractor gives written notice as required. In the case of defective specifications for which the Government is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the Contractor in attempting to comply with the defective specifications.

(e) The Contractor must assert its right to an adjustment under this clause within 30 days after

(1) receipt of a written change order under paragraph (a) of this clause or (2) the furnishing of a written notice under

paragraph (b) of this clause, by submitting to the Contracting Officer a written statement describing the general nature and amount of the proposal, unless this period is extended by the Government. The statement of proposal for adjustment may be included in the notice under paragraph (b) above.

(f) No proposal by the Contractor for an equitable adjustment shall be allowed if asserted after final payment under this contract.

52.244-2 SUBCONTRACTS (AUG 1998)

(a) Definitions. As used in this clause--

Approved purchasing system means a Contractor's purchasing system that has been reviewed and approved in accordance with Part 44 of the Federal Acquisition Regulation (FAR).

Consent to subcontract means the Contracting Officer's written consent for the Contractor to enter into a particular subcontract.

Subcontract means any contract, as defined in FAR Subpart 2.1, entered into by a subcontractor to furnish supplies or services for performance of the prime contract or a subcontract. It includes, but is not limited to, purchase orders, and changes and modifications to purchase orders.

(b) This clause does not apply to subcontracts for special test equipment when the contract contains the clause at FAR 52.245-18, Special Test Equipment.

(c) When this clause is included in a fixed-price type contract, consent to subcontract is required only on unpriced contract actions (including unpriced modifications or unpriced delivery orders), and only if required in accordance with paragraph (d) or (e) of this clause.

(d) If the Contractor does not have an approved purchasing system, consent to subcontract is required for any subcontract that--

(1) Is of the cost-reimbursement, time-and-materials, or labor-hour type; or

(2) Is fixed-price and exceeds--

(i) For a contract awarded by the Department of Defense, the Coast Guard, or the National Aeronautics and Space Administration, the greater of the simplified acquisition threshold or 5 percent of the total estimated cost of the contract; or

(ii) For a contract awarded by a civilian agency other than the Coast Guard and the National Aeronautics and Space Administration, either the simplified acquisition threshold or 5 percent of the total estimated cost of the contract.

(e) If the Contractor has an approved purchasing system, the Contractor nevertheless shall obtain the Contracting Officer's written consent before placing the following subcontracts:

(f)(1) The Contractor shall notify the Contracting Officer reasonably in advance of placing any subcontract or modification thereof for which consent is required under paragraph (c), (d), or (e) of this clause, including the following information:

(i) A description of the supplies or services to be subcontracted.

(ii) Identification of the type of subcontract to be used.

(iii) Identification of the proposed subcontractor.

(iv) The proposed subcontract price.

(v) The subcontractor's current, complete, and accurate cost or pricing data and Certificate of Current Cost or Pricing Data, if required by other contract provisions.

(vi) The subcontractor's Disclosure Statement or Certificate relating to Cost Accounting Standards when such data are required by other provisions of this contract.

(vii) A negotiation memorandum reflecting--

(A) The principal elements of the subcontract price negotiations;

(B) The most significant considerations controlling establishment of initial or revised prices;

(C) The reason cost or pricing data were or were not required;

(D) The extent, if any, to which the Contractor did not rely on the subcontractor's cost or pricing data in determining the price objective and in negotiating the final price;

(E) The extent to which it was recognized in the negotiation that the subcontractor's cost or pricing data were not accurate, complete, or current; the action taken by the Contractor and the subcontractor; and the effect of any such defective data on the total price negotiated;

(F) The reasons for any significant difference between the Contractor's price objective and the price negotiated; and

(G) A complete explanation of the incentive fee or profit plan when incentives are used. The explanation shall identify each critical performance element, management decisions used to quantify each incentive element, reasons for the incentives, and a summary of all trade-off possibilities considered.

(2) The Contractor is not required to notify the Contracting Officer in advance of entering into any subcontract for which consent is not required under paragraph (c), (d), or (e) of this clause.

(g) Unless the consent or approval specifically provides otherwise, neither consent by the Contracting Officer to any subcontract nor approval of the Contractor's purchasing system shall constitute a determination--

(1) Of the acceptability of any subcontract terms or conditions;

(2) Of the allowability of any cost under this contract; or

(3) To relieve the Contractor of any responsibility for performing this contract.

(h) No subcontract or modification thereof placed under this contract shall provide for payment on a cost-plus-a-percentage-of-cost basis, and any fee payable under cost-reimbursement type subcontracts shall not exceed the fee limitations in FAR 15.404-4(c)(4)(i).

(i) The Contractor shall give the Contracting Officer immediate written notice of any action or suit filed and prompt notice of any claim made against the Contractor by any subcontractor or vendor that, in the opinion of the Contractor, may result in litigation related in any way to this contract, with respect to which the Contractor may be entitled to reimbursement from the Government.

(j) The Government reserves the right to review the Contractor's purchasing system as set forth in FAR Subpart 44.3.

(k) Paragraphs (d) and (f) of this clause do not apply to the following subcontracts, which were evaluated during negotiations:

(End of clause)

52.244-6 SUBCONTRACTS FOR COMMERCIAL ITEMS AND COMMERCIAL COMPONENTS (OCT 1998)

(a) Definitions.

"Commercial item", as used in this clause, has the meaning contained in the clause at 52.202-1, Definitions.

"Subcontract", as used in this clause, includes a transfer of commercial items between divisions, subsidiaries, or affiliates of the Contractor or subcontractor at any tier.

(b) To the maximum extent practicable, the Contractor shall incorporate, and require its subcontractors at all tiers to incorporate, commercial items or nondevelopmental items as components of items to be supplied under this contract.

(c) Notwithstanding any other clause of this contract, the Contractor is not required to include any FAR provision or clause, other than those listed below to the extent they are applicable and as may be required to establish the reasonableness of prices under Part 15, in a subcontract at any tier for commercial items or commercial components:

(1) 52.222-26, Equal Opportunity (E.O. 11246);

(2) 52.222-35, Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era (38 U.S.C. 4212(a));

(3) 52.222-36, Affirmative Action for Workers with Disabilities (29 U.S.C. 793); and

(4) 52.247-64, Preference for Privately-Owned U.S.-Flagged Commercial Vessels (46 U.S.C. 1241)(flow down not required for subcontracts awarded beginning May 1, 1996).

(d) The Contractor shall include the terms of this clause, including this paragraph (d), in subcontracts awarded under this contract.

52.245-1 PROPERTY RECORDS (APR 1984)

The Government shall maintain the Government's official property records in connection with Government property under this contract. The Government Property clause is hereby modified by deleting the requirement for the Contractor to maintain such records.

52.245-2 GOVERNMENT PROPERTY (FIXED-PRICE CONTRACTS) (DEC 1989)

(a) Government-furnished property. (1) The Government shall deliver to the Contractor, for use in connection with and under the terms of this contract, the Government-furnished property described in the Schedule or specifications together with any related data and information that the Contractor may request and is reasonably required for the intended use of the property (hereinafter referred to as "Government-furnished property").

(2) The delivery or performance dates for this contract are based upon the expectation that Government-furnished property suitable for use (except for property furnished "as is") will be delivered to the Contractor at the times stated

in the Schedule or, if not so stated, in sufficient time to enable the Contractor to meet the contract's delivery or performance dates.

(3) If Government-furnished property is received by the Contractor in a condition not suitable for the intended use, the Contractor shall, upon receipt of it, notify the Contracting Officer, detailing the facts, and, as directed by the Contracting Officer and at Government expense, either repair, modify, return, or otherwise dispose of the property. After completing the directed action and upon written request of the Contractor, the Contracting Officer shall make an equitable adjustment as provided in paragraph (h) of this clause.

(4) If Government-furnished property is not delivered to the Contractor by the required time, the Contracting Officer shall, upon the Contractor's timely written request, make a determination of the delay, if any, caused the Contractor and shall make an equitable adjustment in accordance with paragraph (h) of this clause.

(b) Changes in Government-furnished property. (1) The Contracting Officer may, by written notice, (i) decrease the Government-furnished property provided or to be provided under this contract, or (ii) substitute other Government-furnished property for the property to be provided by the Government, or to be acquired by the Contractor for the Government, under this contract. The Contractor shall promptly take such action as the Contracting Officer may direct regarding the removal, shipment, or disposal of the property covered by such notice.

(2) Upon the Contractor's written request, the Contracting Officer shall make an equitable adjustment to the contract in accordance with paragraph (h) of this clause, if the Government has agreed in the Schedule to make the property available for performing this contract and there is any--

(i) Decrease or substitution in this property pursuant to subparagraph (b)(1) of this clause; or

(ii) Withdrawal of authority to use this property, if provided under any other contract or lease.

(c) Title in Government property. (1) The Government shall retain title to all Government-furnished property.

(2) All Government-furnished property and all property acquired by the Contractor, title to which vests in the Government under this paragraph (collectively referred to as "Government property"), are subject to the provisions of this clause. However, special tooling accountable to this contract is subject to the provisions of the Special Tooling clause and is not subject to the provisions of this clause. Title to Government property shall not be affected by its incorporation into or attachment to any property not owned by the Government, nor shall Government property become a fixture or lose its identity as personal property by being attached to any real property.

(3) Title to each item of facilities and special test equipment acquired by the Contractor for the Government under this contract shall pass to and vest in the Government when its use in performing this contract commences or when the Government has paid for it, whichever is earlier, whether or not title previously vested in the Government.

(4) If this contract contains a provision directing the Contractor to purchase material for which the Government will reimburse the Contractor as a direct item of cost under this contract--

(i) Title to material purchased from a vendor shall pass to and vest in the Government upon the vendor's delivery of such material; and

(ii) Title to all other material shall pass to and vest in the Government upon--

(A) Issuance of the material for use in contract performance;

(B) Commencement of processing of the material or its use in contract performance; or

(C) Reimbursement of the cost of the material by the Government, whichever occurs first.

(d) Use of Government property. The Government property shall be used only for performing this contract, unless otherwise provided in this contract or approved by the Contracting Officer.

(e) Property administration. (1) The Contractor shall be responsible and accountable for all Government property provided under this contract and shall comply with Federal Acquisition Regulation (FAR) Subpart 45.5, as in effect on the date of this contract.

(2) The Contractor shall establish and maintain a program for the use, maintenance, repair, protection, and preservation of Government property in accordance with sound industrial practice and the applicable provisions of Subpart 45.5 of the FAR.

(3) If damage occurs to Government property, the risk of which has been assumed by the Government under this contract, the Government shall replace the items or the Contractor shall make such repairs as the Government directs. However, if the Contractor cannot effect such repairs within the time required, the Contractor shall dispose of the property as directed by the Contracting Officer. When any property for which the Government is responsible is replaced or repaired, the Contracting Officer shall make an equitable adjustment in accordance with paragraph (h) of this clause.

(4) The Contractor represents that the contract price does not include any amount for repairs or replacement for which the Government is responsible. Repair or replacement of property for which the Contractor is responsible shall be accomplished by the Contractor at its own expense.

(f) Access. The Government and all its designees shall have access at all reasonable times to the premises in which any Government property is located for the purpose of inspecting the Government property.

(g) Risk of loss. Unless otherwise provided in this contract, the Contractor assumes the risk of, and shall be responsible for, any loss or destruction of, or damage to, Government property upon its delivery to the Contractor or upon passage of title to the Government under paragraph (c) of this clause. However, the Contractor is not responsible for reasonable wear and tear to Government property or for Government property properly consumed in performing this contract.

(h) Equitable adjustment. When this clause specifies an equitable adjustment, it shall be made to any affected contract provision in accordance with the procedures of the Changes clause. When appropriate, the Contracting Officer may initiate an equitable adjustment in favor of the Government. The right to an equitable adjustment shall be the Contractor's exclusive remedy. The Government shall not be liable to suit for breach of contract for--

(1) Any delay in delivery of Government-furnished property;

(2) Delivery of Government-furnished property in a condition not suitable for its intended use;

(3) A decrease in or substitution of Government-furnished property; or

(4) Failure to repair or replace Government property for which the Government is responsible.

(i) Final accounting and disposition of Government property. Upon completing this contract, or at such earlier dates as may be fixed by the Contracting Officer, the Contractor shall submit, in a form acceptable to the Contracting Officer, inventory schedules covering all items of Government property (including any resulting scrap) not consumed in performing this contract or delivered to the Government. The Contractor shall prepare for shipment, deliver f.o.b. origin, or dispose of the Government property as may be directed or authorized by the Contracting Officer. The net proceeds of any such disposal shall be credited to the contract price or shall be paid to the Government as the Contracting Officer directs.

(j) Abandonment and restoration of Contractor's premises. Unless otherwise provided herein, the Government--

(1) May abandon any Government property in place, at which time all obligations of the Government regarding such abandoned property shall cease; and

(2) Has no obligation to restore or rehabilitate the Contractor's premises under any circumstances (e.g., abandonment, disposition upon completion of need, or upon contract completion). However, if the Government-furnished property (listed in the Schedule or specifications) is withdrawn or is unsuitable for the intended use, or if other Government property is substituted, then the equitable adjustment under paragraph (h) of this clause may properly include restoration or rehabilitation costs.

(k) Communications. All communications under this clause shall be in writing.

(l) Overseas contracts. If this contract is to be performed outside of the United States of America, its territories, or possessions, the words "Government" and "Government-furnished" (wherever they appear in this clause) shall be construed as "United States Government" and "United States Government-furnished," respectively.

(End of clause)

52.245-3 IDENTIFICATION OF GOVERNMENT-FURNISHED PROPERTY (APR 1984)

(a) The Government will furnish to the Contractor the property identified in the Schedule to be incorporated or installed into the work or used in performing the contract. The listed property will be furnished f.o.b. railroad cars at the place specified in the contract Schedule or f.o.b. truck at the project site. The Contractor is required to accept delivery, pay any demurrage or detention charges, and unload and transport the property to the job site at its own expense. When the property is delivered, the Contractor shall verify its quantity and condition and acknowledge receipt in writing to the Contracting Officer. The Contractor shall also report in writing to the Contracting Officer within 24 hours of delivery any damage to or shortage of the property as received. All such property shall be installed or incorporated into the work at the expense of the Contractor, unless otherwise indicated in this contract.

(b) Each item of property to be furnished under this clause shall be identified in the Schedule by quantity, item, and description.

52.245-4 GOVERNMENT-FURNISHED PROPERTY (SHORT FORM) (APR 1984)

(a) The Government shall deliver to the Contractor, at the time and locations stated in this contract, the Government-furnished property described in the Schedule or specifications. If that property, suitable for its intended use, is not delivered to the Contractor, the Contracting Officer shall equitably adjust affected provisions of this contract in accordance with the Changes clause when--

(1) The Contractor submits a timely written request for an equitable adjustment; and

(2) The facts warrant an equitable adjustment.

(b) Title to Government-furnished property shall remain in the Government. The Contractor shall use the Government-furnished property only in connection with this contract. The Contractor shall maintain adequate property control records in accordance with sound industrial practice and will make such records available for Government inspection at all reasonable times, unless the clause at Federal Acquisition Regulation 52.245-1, Property Records, is included in this contract.

(c) Upon delivery of Government-furnished property to the Contractor, the Contractor assumes the risk and responsibility for its loss or damage, except--

(1) For reasonable wear and tear;

(2) To the extent property is consumed in performing this contract; or

(3) As otherwise provided for by the provisions of this contract.

(d) Upon completing this contract, the Contractor shall follow the instructions of the Contracting Officer regarding the disposition of all Government-furnished property not consumed in performing this contract or previously delivered to the Government. The Contractor shall prepare for shipment, deliver f.o.b. origin, or dispose of the Government property, as may be directed or authorized by the Contracting Officer. The net proceeds of any such disposal shall be credited to the contract price or shall be paid to the Government as directed by the Contracting Officer.

(e) If this contract is to be performed outside the United States of America, its territories, or possessions, the words "Government" and "Government-furnished" (wherever they appear in this clause) shall be construed as "United States Government" and "United States Government-furnished," respectively.

52.245-18 SPECIAL TEST EQUIPMENT (FEB 1993)

(a) "Special test equipment," as used in this clause, means either single or multipurpose integrated test units engineered, designed, fabricated, or modified to accomplish special purpose testing in performing a contract. It consists of items or assemblies of equipment, including standard or general purpose items or components, that are interconnected and interdependent so as to become a new functional entity for special testing purposes. It does not include material, special tooling, facilities (except foundations and similar improvements necessary for installing special test equipment), and plant equipment items used for general plant testing purposes.

(b) The Contractor may either acquire or fabricate special test equipment at Government expense when the equipment is not otherwise itemized in this contract and the prior approval of the Contracting Officer has been obtained. The Contractor shall provide the Contracting Officer with a written notice, at least 30 days in advance, of the Contractor's intention to acquire or fabricate the special test equipment. As a minimum, the notice shall also include an estimated aggregate cost of all items and components of the equipment the individual cost of which is less than \$5,000, and the following information on each item or component of equipment costing \$5,000 or more:

(1) The end use application and function of each proposed special test unit, identifying special characteristics and the reasons for the classification of the test unit as special test equipment.

(2) A complete description identifying the items to be acquired and the items to be fabricated by the Contractor.

(3) The estimated cost of the item of special test equipment or component.

(4) A statement that intra-plant screening of Contractor and Government-owned special test equipment and components has been accomplished and that none are available for use in performing this contract.

(c) The Government may furnish any special test equipment or components rather than approve their acquisition or fabrication by the Contractor. Such Government-furnished items shall be subject to the Government Property clause, except that the Government shall not be obligated to deliver such items any sooner than the Contractor could have acquired or fabricated them after expiration of the 30-day notice period in paragraph (b) of this clause. However, unless the Government notifies the Contractor of its decision to furnish the items within the 30-day notice period, the Contractor may proceed to acquire or fabricate the equipment or components subject to any other applicable provisions of this contract.

(d) The Contractor shall, in any subcontract that provides that special test equipment or components may be acquired or fabricated for the Government, insert provisions that conform substantially to the language of this clause, including this paragraph (d). The Contractor shall furnish the names of such subcontractors to the Contracting Officer.

(e) If an engineering change requires either the acquisition or fabrication of new special test equipment or substantial modification of existing special test equipment, the Contractor shall comply with paragraph (b) above. In so complying, the Contractor shall identify the change order which requires the proposed acquisition, fabrication, or modification.

52.246-19 WARRANTY OF SYSTEMS AND EQUIPMENT UNDER PERFORMANCE SPECIFICATIONS OR DESIGN CRITERIA (DEC 1989)

(a) Definitions.

"Acceptance," as used in this clause, means the act of an authorized representative of the Government by which the Government assumes for itself, or as an agent of another, ownership of existing and identified supplies, or approves specific services rendered, as partial or complete performance of the contract.

"Correction," as used in this clause, means the elimination of a defect.

"Defect," as used in this clause, means any condition or characteristic in any supplies or services furnished by the Contractor under the contract that is not in compliance with the requirements of the contract.

"Supplies," as used in this clause, means the end items furnished by the Contractor and related services required under this contract. Except when this contract includes the clause entitled Warranty of Data, supplies also means "data."

(b) Contractor's obligations. (1) The Contractor's warranties under this clause shall apply only to those defects discovered by either the Government or the Contractor

(2) If the Contractor becomes aware at any time before acceptance by the Government (whether before or after tender to the Government) that a defect exists in any supplies or services, the Contractor shall (i) promptly correct the defect, or (ii) promptly notify the Contracting Officer, in writing, of the defect, using the same procedures prescribed in paragraph (b)(3) of this clause.

(3) If the Contracting Officer determines that a defect exists in any of the supplies or services accepted by the Government under this contract, the Contracting Officer shall promptly notify the Contractor of the defect, in writing, within . Upon timely notification of the existence of a defect, or if the Contractor independently discovers a defect in accepted supplies or services, the Contractor shall submit to the Contracting Officer, in writing, within a recommendation for corrective actions, together with supporting information in sufficient detail for the Contracting Officer to determine what corrective action, if any, shall be undertaken.

(4) The Contractor shall promptly comply with any timely written direction from the Contracting Officer to correct or partially correct a defect, at no increase in the contract price.

(5) The Contractor shall also prepare and furnish to the Contracting Officer data and reports applicable to any correction required under this clause (including revision and updating of all other affected data called for under this contract) at no increase in the contract price.

(6) In the event of timely notice of a decision not to correct or only to partially correct, the Contractor shall submit a technical and cost proposal within to amend the contract to permit acceptance of the affected supplies or services in accordance with the revised requirement, and an equitable reduction in the contract price shall promptly be negotiated by the parties and be reflected in a supplemental agreement to this contract.

(7) Any supplies or parts thereof corrected or furnished in replacement and any services reperformed shall also be subject to the conditions of this clause to the same extent as supplies or services initially accepted. The warranty, with respect to these supplies, parts, or services, shall be equal in duration to that set forth in paragraph (b)(1) of this

clause, and shall run from the date of delivery of the corrected or replaced supplies.

(8) The Contractor shall not be responsible under this clause for the correction of defects in Government-furnished property, except for defects in installation, unless the Contractor performs, or is obligated to perform, any modifications or other work on such property. In that event, the Contractor shall be responsible for correction of defects that result from the modifications or other work.

(9) If the Government returns supplies to the Contractor for correction or replacement under this clause, the Contractor shall be liable for transportation charges up to an amount equal to the cost of transportation by the usual commercial method of shipment from the place of delivery specified in this contract (irrespective of the f.o.b. point or the point of acceptance) to the Contractor's plant and return to the place of delivery specified in this contract. The Contractor shall also bear the responsibility for the supplies while in transit.

(10) All implied warranties of merchantability and "fitness for a particular purpose" are excluded from any obligation under this contract.

(c) Remedies available to the Government. (1) The rights and remedies of the Government provided in this clause--

(i) Shall not be affected in any way by any terms or conditions of this contract concerning the conclusiveness of inspection and acceptance; and

(ii) Are in addition to, and do not limit, any rights afforded to the Government by any other clause of this contract.

(2) Within after receipt of the Contractor's recommendations for corrective action and adequate supporting information, the Contracting Officer, using sole discretion, shall give the Contractor written notice not to correct any defect, or to correct or partially correct any defect within a reasonable time at

(3) In no event shall the Government be responsible for any extension or delays in the scheduled deliveries or periods of performance under this contract as a result of the Contractor's obligations to correct defects, nor shall there be any adjustment of the delivery schedule or period of performance as a result of the correction of defects unless provided by a supplemental agreement with adequate consideration.

(4) This clause shall not be construed as obligating the Government to increase the contract price.

(5)(i) The Contracting Officer shall give the Contractor a written notice specifying any failure or refusal of the Contractor to--

(A) Present a detailed recommendation for corrective action as required by paragraph (b)(3) of this clause;

(B) Correct defects as directed under paragraph (b)(4) of this clause; or

(C) Prepare and furnish data and reports as required by paragraph (b)(5) of this clause.

(ii) The notice shall specify a period of time following receipt of the notice by the Contractor in which the Contractor must remedy the failure or refusal specified in the notice.

(6) If the Contractor does not comply with the Contracting Officer's written notice in paragraph (c)(5)(i) of this clause, the Contracting Officer may by contract or otherwise--

(i) Obtain detailed recommendations for corrective action and either--

(A) Correct the supplies or services; or

(B) Replace the supplies or services, and if the Contractor fails to furnish timely disposition instructions, the Contracting Officer may dispose of the nonconforming supplies for the Contractor's account in a reasonable manner,

in which case the Government is entitled to reimbursement from the Contractor, or from the proceeds, for the reasonable expenses of care and disposition, as well as for excess costs incurred or to be incurred;

(ii) Obtain applicable data and reports; and

(iii) Charge the Contractor for the costs incurred by the Government.

(End of clause)

52.246-20 WARRANTY OF SERVICES (APR 1984)

(a) Definitions. "Acceptance," as used in this clause, means the act of an authorized representative of the Government by which the Government assumes for itself, or as an agent of another, ownership of existing and identified supplies, or approves specific services, as partial or complete performance of the contract. "Correction," as used in this clause, means the elimination of a defect.

(b) Notwithstanding inspection and acceptance by the Government or any provision concerning the conclusiveness thereof, the Contractor warrants that all services performed under this contract will, at the time of acceptance, be free from defects in workmanship and conform to the requirements of this contract. The Contracting Officer shall give written notice of any defect or nonconformance to the Contractor _____. This notice shall state either (1) that the Contractor shall correct or reperform any defective or nonconforming services, or (2) that the Government does not require correction or reperformance.

(c) If the Contractor is required to correct or reperform, it shall be at no cost to the Government, and any services corrected or reperformed by the Contractor shall be subject to this clause to the same extent as work initially performed. If the Contractor fails or refuses to correct or reperform, the Contracting Officer may, by contract or otherwise, correct or replace with similar services and charge to the Contractor the cost occasioned to the Government thereby, or make an equitable adjustment in the contract price.

(d) If the Government does not require correction or reperformance, the Contracting Officer shall make an equitable adjustment in the contract price.

52.246-25 LIMITATION OF LIABILITY--SERVICES (FEB 1997)

(a) Except as provided in paragraphs (b) and (c) below, and except to the extent that the Contractor is expressly responsible under this contract for deficiencies in the services required to be performed under it (including any materials furnished in conjunction with those services), the Contractor shall not be liable for loss of or damage to property of the Government that (1) occurs after Government acceptance of services performed under this contract, and (2) results from any defects or deficiencies in the services performed or materials furnished.

(b) The limitation of liability under paragraph (a) above shall not apply when a defect or deficiency in, or the Government's acceptance of, services performed or materials furnished results from willful misconduct or lack of good faith on the part of any of the Contractor's managerial personnel. The term "Contractor's managerial personnel," as used in this clause, means the Contractor's directors, officers, and any of the Contractor's managers, superintendents, or equivalent representatives who have supervision or direction of--

(1) All or substantially all of the Contractor's business;

(2) All or substantially all of the Contractor's operations at any one plant, laboratory, or separate location at which the contract is being performed; or

(3) A separate and complete major industrial operation connected with the performance of this contract.

(c) If the Contractor carries insurance, or has established a reserve for self-insurance, covering liability for loss or

damage suffered by the Government through the Contractor's performance of services or furnishing of materials under this contract, the Contractor shall be liable to the Government, to the extent of such insurance or reserve, for loss of or damage to property of the Government occurring after Government acceptance of, and resulting from any defects and deficiencies in, services performed or materials furnished under this contract.

52.249-2 TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED-PRICE) (SEP 1996)

(a) The Government may terminate performance of work under this contract in whole or, from time to time, in part if the Contracting Officer determines that a termination is in the Government's interest. The Contracting Officer shall terminate by delivering to the Contractor a Notice of Termination specifying the extent of termination and the effective date.

(b) After receipt of a Notice of Termination, and except as directed by the Contracting Officer, the Contractor shall immediately proceed with the following obligations, regardless of any delay in determining or adjusting any amounts due under this clause:

(1) Stop work as specified in the notice.

(2) Place no further subcontracts or orders (referred to as subcontracts in this clause) for materials, services, or facilities, except as necessary to complete the continued portion of the contract.

(3) Terminate all subcontracts to the extent they relate to the work terminated.

(4) Assign to the Government, as directed by the Contracting Officer, all right, title, and interest of the Contractor under the subcontracts terminated, in which case the Government shall have the right to settle or to pay any termination settlement proposal arising out of those terminations.

(5) With approval or ratification to the extent required by the Contracting Officer, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts; the approval or ratification will be final for purposes of this clause.

(6) As directed by the Contracting Officer, transfer title and deliver to the Government (i) the fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced or acquired for the work terminated, and (ii) the completed or partially completed plans, drawings, information, and other property that, if the contract had been completed, would be required to be furnished to the Government.

(7) Complete performance of the work not terminated.

(8) Take any action that may be necessary, or that the Contracting Officer may direct, for the protection and preservation of the property related to this contract that is in the possession of the Contractor and in which the Government has or may acquire an interest.

(9) Use its best efforts to sell, as directed or authorized by the Contracting Officer, any property of the types referred to in subparagraph (b)(6) of this clause; provided, however, that the Contractor (i) is not required to extend credit to any purchaser and (ii) may acquire the property under the conditions prescribed by, and at prices approved by, the Contracting Officer. The proceeds of any transfer or disposition will be applied to reduce any payments to be made by the Government under this contract, credited to the price or cost of the work, or paid in any other manner directed by the Contracting Officer.

(c) The Contractor shall submit complete termination inventory schedules no later than 120 days from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 120-day period.

(d) After expiration of the plant clearance period as defined in Subpart 45.6 of the Federal Acquisition Regulation, the Contractor may submit to the Contracting Officer a list, certified as to quantity and quality, of termination

inventory not previously disposed of, excluding items authorized for disposition by the Contracting Officer. The Contractor may request the Government to remove those items or enter into an agreement for their storage. Within 15 days, the Government will accept title to those items and remove them or enter into a storage agreement. The Contracting Officer may verify the list upon removal of the items, or if stored, within 45 days from submission of the list, and shall correct the list, as necessary, before final settlement.

(e) After termination, the Contractor shall submit a final termination settlement proposal to the Contracting Officer in the form and with the certification prescribed by the Contracting Officer. The Contractor shall submit the proposal promptly, but no later than 1 year from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 1-year period. However, if the Contracting Officer determines that the facts justify it, a termination settlement proposal may be received and acted on after 1 year or any extension. If the Contractor fails to submit the proposal within the time allowed, the Contracting Officer may determine, on the basis of information available, the amount, if any, due the Contractor because of the termination and shall pay the amount determined.

(f) Subject to paragraph (e) of this clause, the Contractor and the Contracting Officer may agree upon the whole or any part of the amount to be paid or remaining to be paid because of the termination. The amount may include a reasonable allowance for profit on work done. However, the agreed amount, whether under this paragraph (g) or paragraph (g) of this clause, exclusive of costs shown in subparagraph (g)(3) of this clause, may not exceed the total contract price as reduced by (1) the amount of payments previously made and (2) the contract price of work not terminated. The contract shall be modified, and the Contractor paid the agreed amount. Paragraph (g) of this clause shall not limit, restrict, or affect the amount that may be agreed upon to be paid under this paragraph.

(g) If the Contractor and the Contracting Officer fail to agree on the whole amount to be paid because of the termination of work, the Contracting Officer shall pay the Contractor the amounts determined by the Contracting Officer as follows, but without duplication of any amounts agreed on under paragraph (f) of this clause:

(1) The contract price for completed supplies or services accepted by the Government (or sold or acquired under subparagraph (b)(9) of this clause) not previously paid for, adjusted for any saving of freight and other charges.

(2) The total of--

(i) The costs incurred in the performance of the work terminated, including initial costs and preparatory expense allocable thereto, but excluding any costs attributable to supplies or services paid or to be paid under subparagraph (f)(1) of this clause;

(ii) The cost of settling and paying termination settlement proposals under terminated subcontracts that are properly chargeable to the terminated portion of the contract if not included in subdivision (g)(2)(i) of this clause; and

(iii) A sum, as profit on subdivision (g)(2)(i) of this clause, determined by the Contracting Officer under 49.202 of the Federal Acquisition Regulation, in effect on the date of this contract, to be fair and reasonable; however, if it appears that the Contractor would have sustained a loss on the entire contract had it been completed, the Contracting Officer shall allow no profit under this subdivision (iii) and shall reduce the settlement to reflect the indicated rate of loss.

(3) The reasonable costs of settlement of the work terminated, including--

(i) Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals and supporting data;

(ii) The termination and settlement of subcontracts (excluding the amounts of such settlements); and

(iii) Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory.

(h) Except for normal spoilage, and except to the extent that the Government expressly assumed the risk of loss, the Contracting Officer shall exclude from the amounts payable to the Contractor under paragraph (g) of this clause, the fair value, as determined by the Contracting Officer, of property that is destroyed, lost, stolen, or damaged so as to become undeliverable to the Government or to a buyer.

(i) The cost principles and procedures of Part 31 of the Federal Acquisition Regulation, in effect on the date of this contract, shall govern all costs claimed, agreed to, or determined under this clause.

(j) The Contractor shall have the right of appeal, under the Disputes clause, from any determination made by the Contracting Officer under paragraph (e), (g), or (l) of this clause, except that if the Contractor failed to submit the termination settlement proposal or request for equitable adjustment within the time provided in paragraph (e) or (l), respectively, and failed to request a time extension, there is no right of appeal.

(k) In arriving at the amount due the Contractor under this clause, there shall be deducted--

(1) All unliquidated advance or other payments to the Contractor under the terminated portion of this contract;

(2) Any claim which the Government has against the Contractor under this contract; and

(3) The agreed price for, or the proceeds of sale of, materials, supplies, or other things acquired by the Contractor or sold under the provisions of this clause and not recovered by or credited to the Government.

(l) If the termination is partial, the Contractor may file a proposal with the Contracting Officer for an equitable adjustment of the price(s) of the continued portion of the contract. The Contracting Officer shall make any equitable adjustment agreed upon. Any proposal by the Contractor for an equitable adjustment under this clause shall be requested within 90 days from the effective date of termination unless extended in writing by the Contracting Officer.

(m)(1) The Government may, under the terms and conditions it prescribes, make partial payments and payments against costs incurred by the Contractor for the terminated portion of the contract, if the Contracting Officer believes the total of these payments will not exceed the amount to which the Contractor will be entitled.

(2) If the total payments exceed the amount finally determined to be due, the Contractor shall repay the excess to the Government upon demand, together with interest computed at the rate established by the Secretary of the Treasury under 50 U.S.C. App. 1215(b)(2). Interest shall be computed for the period from the date the excess payment is received by the Contractor to the date the excess is repaid. Interest shall not be charged on any excess payment due to a reduction in the Contractor's termination settlement proposal because of retention or other disposition of termination inventory until 10 days after the date of the retention or disposition, or a later date determined by the Contracting Officer because of the circumstances.

(n) Unless otherwise provided in this contract or by statute, the Contractor shall maintain all records and documents relating to the terminated portion of this contract for 3 years after final settlement. This includes all books and other evidence bearing on the Contractor's costs and expenses under this contract. The Contractor shall make these records and documents available to the Government, at the Contractor's office, at all reasonable times, without any direct charge. If approved by the Contracting Officer, photographs, microphotographs, or other authentic reproductions may be maintained instead of original records and documents.

52.249-4 TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (SERVICES) (SHORT FORM) (APR 1984)

The Contracting Officer, by written notice, may terminate this contract, in whole or in part, when it is in the Government's interest. If this contract is terminated, the Government shall be liable only for payment under the payment provisions of this contract for services rendered before the effective date of termination.

52.249-8 DEFAULT (FIXED-PRICE SUPPLY AND SERVICE) (APR 1984)

(a)(1) The Government may, subject to paragraphs (c) and (d) of this clause, by written notice of default to the Contractor, terminate this contract in whole or in part if the Contractor fails to--

(i) Deliver the supplies or to perform the services within the time specified in this contract or any extension;

(ii) Make progress, so as to endanger performance of this contract (but see subparagraph (a)(2) of this clause); or

(iii) Perform any of the other provisions of this contract (but see subparagraph (a)(2) below).

(2) The Government's right to terminate this contract under subdivisions (a)(1)(ii) and (1)(iii) of this clause, may be exercised if the Contractor does not cure such failure within 10 days (or more if authorized in writing by the Contracting Officer) after receipt of the notice from the Contracting Officer specifying the failure.

(b) If the Government terminates this contract in whole or in part, it may acquire, under the terms and in the manner the Contracting Officer considers appropriate, supplies or services similar to those terminated, and the Contractor will be liable to the Government for any excess costs for those supplies or services. However, the Contractor shall continue the work not terminated.

(c) Except for defaults of subcontractors at any tier, the Contractor shall not be liable for any excess costs if the failure to perform the contract arises from causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include (1) acts of God or of the public enemy, (2) acts of the Government in either its sovereign or contractual capacity, (3) fires, (4) floods, (5) epidemics, (6) quarantine restrictions, (7) strikes, (8) freight embargoes, and (9) unusually severe weather. In each instance the failure to perform must be beyond the control and without the fault or negligence of the Contractor.

(d) If the failure to perform is caused by the default of a subcontractor at any tier, and if the cause of the default is beyond the control of both the Contractor and subcontractor, and without the fault or negligence of either, the Contractor shall not be liable for any excess costs for failure to perform, unless the subcontracted supplies or services were obtainable from other sources in sufficient time for the Contractor to meet the required delivery schedule.

(e) If this contract is terminated for default, the Government may require the Contractor to transfer title and deliver to the Government, as directed by the Contracting Officer, any (1) completed supplies, and (2) partially completed supplies and materials, parts, tools, dies, jigs, fixtures, plans, drawings, information, and contract rights (collectively referred to as "manufacturing materials" in this clause) that the Contractor has specifically produced or acquired for the terminated portion of this contract. Upon direction of the Contracting Officer, the Contractor shall also protect and preserve property in its possession in which the Government has an interest.

(f) The Government shall pay contract price for completed supplies delivered and accepted. The Contractor and Contracting Officer shall agree on the amount of payment for manufacturing materials delivered and accepted and for the protection and preservation of the property. Failure to agree will be a dispute under the Disputes clause. The Government may withhold from these amounts any sum the Contracting Officer determines to be necessary to protect the Government against loss because of outstanding liens or claims of former lien holders.

(g) If, after termination, it is determined that the Contractor was not in default, or that the default was excusable, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the Government.

(h) The rights and remedies of the Government in this clause are in addition to any other rights and remedies provided by law or under this contract.

52.249-10 DEFAULT (FIXED-PRICE CONSTRUCTION) (APR 1984)

(a) If the Contractor refuses or fails to prosecute the work or any separable part, with the diligence that will insure its completion within the time specified in this contract including any extension, or fails to complete the work within this time, the Government may, by written notice to the Contractor, terminate the right to proceed with the work (or the separable part of the work) that has been delayed. In this event, the Government may take over the work and complete it by contract or otherwise, and may take possession of and use any materials, appliances, and plant on the work site necessary for completing the work. The Contractor and its sureties shall be liable for any damage to the Government resulting from the Contractor's refusal or failure to complete the work within the specified time, whether or not the Contractor's right to proceed with the work is terminated. This liability includes any increased costs incurred by the Government in completing the work.

(b) The Contractor's right to proceed shall not be terminated nor the Contractor charged with damages under this clause, if--

(1) The delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include

(i) acts of God or of the public enemy,

(ii) acts of the Government in either its sovereign or contractual capacity,

(iii) acts of another Contractor in the performance of a contract with the Government,

(iv) fires,

(v) floods,

(vi) epidemics,

(vii) quarantine restrictions,

(viii) strikes,

(ix) freight embargoes,

(x) unusually severe weather, or delays of subcontractors or suppliers at any tier arising from unforeseeable causes beyond the control and without the fault or negligence of both the Contractor and the subcontractors or suppliers; and

(2) The Contractor, within 10 days from the beginning of any delay (unless extended by the Contracting Officer), notifies the Contracting Officer in writing of the causes of delay. The Contracting Officer shall ascertain the facts and the extent of delay. If, in the judgment of the Contracting Officer, the findings of fact warrant such action, the time for completing the work shall be extended. The findings of the Contracting Officer shall be final and conclusive on the parties, but subject to appeal under the Disputes clause.

(c) If, after termination of the Contractor's right to proceed, it is determined that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the termination had been issued for the convenience of the Government.

The rights and remedies of the Government in this clause are in addition to any other rights and remedies provided by law or under this contract.

52.253-1 COMPUTER GENERATED FORMS (JAN 1991)

(a) Any data required to be submitted on a Standard or Optional Form prescribed by the Federal Acquisition Regulation (FAR) may be submitted on a computer generated version of the form, provided there is no change to the name, content, or sequence of the data elements on the form, and provided the form carries the Standard or Optional Form number and edition date.

(b) Unless prohibited by agency regulations, any data required to be submitted on an agency unique form prescribed by an agency supplement to the FAR may be submitted on a computer generated version of the form provided there is no change to the name, content, or sequence of the data elements on the form and provided the form carries the agency form number and edition date.

(c) If the Contractor submits a computer generated version of a form that is different than the required form, then the rights and obligations of the parties will be determined based on the content of the required form.

252.203-7001 PROHIBITION ON PERSONS CONVICTED OF FRAUD OR OTHER DEFENSE-CONTRACT-RELATED FELONIES (MAR 1999)

(a) Definitions. As used in this clause—

(1) “Arising out of a contract with the DoD” means any act in connection with—

(i) Attempting to obtain;

(ii) Obtaining, or

(iii) Performing a contract or first-tier subcontract of any agency, department, or component of the Department of Defense (DoD).

(2) “Conviction of fraud or any other felony” means any conviction for fraud or a felony in violation of state or Federal criminal statutes, whether entered on a verdict or plea, including a plea of *nolo contendere*, for which sentence has been imposed.

(3) “Date of conviction” means the date judgment was entered against the individual.

(b) Any individual who is convicted after September 29, 1988, of fraud or any other felony arising out of a contract with the DoD is prohibited from serving--

(1) In a management or supervisory capacity on any DoD contract or first-tier subcontract;

(2) On the board of directors of any DoD contractor or first-tier subcontractor;

(3) As a consultant, agent, or representative for any DoD contractor or first-tier subcontractor; or

(4) In any other capacity with the authority to influence, advise, or control the decisions of any DoD contractor or subcontractor with regard to any DoD contract or first-tier subcontract.

(c) Unless waived, the prohibition in paragraph (b) of this clause applies for not less than 5 years from the date of conviction.

(d) 10 U.S.C. 2408 provides that a defense contractor or first-tier subcontractor shall be subject to a criminal penalty of not more than \$500,000 if convicted of knowingly—

(1) Employing a person under a prohibition specified in paragraph (b) of this clause; or

(2) Allowing such a person to serve on the board of directors of the contractor or first-tier subcontractor.

(e) In addition to the criminal penalties contained in 10 U.S.C. 2408, the Government may consider other available remedies, such as—

(1) Suspension or debarment;

(2) Cancellation of the contract at no cost to the Government; or

(3) Termination of the contract for default.

(f) The Contractor may submit written requests for waiver of the prohibition in paragraph (b) of this clause to the Contracting Officer. Requests shall clearly identify—

(1) The person involved;

(2) The nature of the conviction and resultant sentence or punishment imposed;

(3) The reasons for the requested waiver; and

(4) An explanation of why a waiver is in the interest of national security.

(g) The Contractor agrees to include the substance of this clause, appropriately modified to reflect the identity and relationship of the parties, in all first-tier subcontracts exceeding the simplified acquisition threshold in Part 2 of the Federal Acquisition Regulation, except those for commercial items or components.

(h) Pursuant to 10 U.S.C. 2408(c), defense contractors and subcontractors may obtain information as to whether a particular person has been convicted of fraud or any other felony arising out of a contract with the DoD by contacting The Office of Justice Programs, The Denial of Federal Benefits Office, U.S. Department of Justice, telephone (202) 616-3507.

(End of clause)

252.203-7002 DISPLAY OF DOD HOTLINE POSTER (DEC 1991)

(a) The Contractor shall display prominently in common work areas within business segments performing work under Department of Defense (DoD) contracts, DoD Hotline Posters prepared by the DoD Office of the Inspector General.

(b) DoD Hotline Posters may be obtained from the DoD Inspector General, ATTN: Defense Hotline, 400 Army Navy Drive, Washington, DC 22202-2884.

(c) The Contractor need not comply with paragraph (a) of this clause if it has established a mechanism, such as a hotline, by which employees may report suspected instances of improper conduct, and instructions that encourage employees to make such reports.

(End of clause)

252.204-7000 DISCLOSURE OF INFORMATION (DEC 1991)

(a) The Contractor shall not release to anyone outside the Contractor's organization any unclassified information, regardless of medium (e.g., film, tape, document), pertaining to any part of this contract or any program related to this contract, unless--

(1) The Contracting Officer has given prior written approval; or

(2) The information is otherwise in the public domain before the date of release.

(b) Requests for approval shall identify the specific information to be released, the medium to be used, and the purpose for the release. The Contractor shall submit its request to the Contracting Officer at least 45 days before the proposed date for release.

(c) The Contractor agrees to include a similar requirement in each subcontract under this contract. Subcontractors shall submit requests for authorization to release through the prime contractor to the Contracting Officer.

(End of clause)

252.204-7003 CONTROL OF GOVERNMENT PERSONNEL WORK PRODUCT (APR 1992)

The Contractor's procedures for protecting against unauthorized disclosure of information shall not require Department of Defense employees or members of the Armed Forces to relinquish control of their work products, whether classified or not, to the contractor.

(End of clause)

252.215-7000 PRICING ADJUSTMENTS (DEC 1991)

The term "pricing adjustment," as used in paragraph (a) of the clauses entitled "Price Reduction for Defective Cost or Pricing Data - Modifications," "Subcontractor Cost or Pricing Data," and "Subcontractor Cost or Pricing Data - Modifications," means the aggregate increases and/or decreases in cost plus applicable profits.

252.215-7002 COST ESTIMATING SYSTEM REQUIREMENTS (OCT 1998)

(a) "Definition."

"Estimating system" means the Contractor's policies, procedures, and practices for generating estimates of costs and other data included in proposals submitted to customers in the expectation of receiving contract awards. Estimating system includes the Contractor's --

(1) Organizational structure;

(2) Established lines of authority, duties, and responsibilities;

(3) Internal controls and managerial reviews;

(4) Flow of work, coordination, and communication; and

(5) Estimating methods, techniques, accumulation of historical costs, and other analyses used to generate cost estimates.1997

(b) "General."

(1) The Contractor shall establish, maintain, and comply with an estimating system that is consistently applied and produces reliable, verifiable, supportable, and documented cost estimates that are an acceptable basis for negotiation of fair and reasonable prices.

(2) The system should be --

(i) Consistent and integrated with the Contractor's related management systems; and

(ii) Subject to applicable financial control systems.

(c) "Applicability". Paragraphs (d) and (e) of this clause apply if the Contractor is a large business and either --

(1) In its fiscal year preceding award of this contract, received Department of Defense (DoD) prime contracts or subcontracts, totaling \$50 million or more for which certified cost or pricing data were required; or

(2) In its fiscal year preceding award of this contract --

(i) Received DoD prime contracts or subcontracts totaling \$10 million or more (but less than \$50 million) for which certified cost or pricing data were required; and

(ii) Was notified in writing by the Contracting Officer that paragraphs (d) and (e) of this clause apply.

(d) "System requirements."

(1) The Contractor shall disclose its estimating system to the Administrative Contracting Officer (ACO) in writing. If the Contractor wishes the Government to protect the information as privileged or confidential, the Contractor must mark the documents with the appropriate legends before submission.

(2) An estimating system disclosure is adequate when the Contractor has provided the ACO with documentation that--

(i) Accurately describes those policies, procedures, and practices that the Contractor currently uses in preparing cost proposals; and

(ii) Provides sufficient detail for the Government to reasonably make an informed judgment regarding the acceptability of the Contractor's estimating practices.

(3) The Contractor shall --

(i) Comply with its disclosed estimating system; and

(ii) Disclose significant changes to the cost estimating system to the ACO on a timely basis.

(e) "Estimating system deficiencies."

(1) The Contractor shall respond to a written report from the Government that identifies deficiencies in the Contractor's estimating system as follows:

(i) If the Contractor agrees with the report findings and recommendations, the Contractor shall --

(A) Within 30 days, state its agreement in writing; and

(B) Within 60 days, correct the deficiencies or submit a corrective action plan showing proposed milestones and actions leading to elimination of the deficiencies.

(ii) If the Contractor disagrees with the report, the Contractor shall, within 30 days, state its rationale for disagreeing.

(2) The ACO will evaluate the Contractor's response and notify the Contractor of the determination concerning remaining deficiencies and/or the adequacy of any proposed or completed corrective action.

52.219-7003 SMALL, SMALL DISADVANTAGED AND WOMEN-OWNED SMALL BUSINESS
SUBCONTRACTING PLAN (DOD CONTRACTS) (APR. 1996)

This clause supplements the Federal Acquisition Regulation 52.219-9, Small, Small Disadvantaged and Women-Owned Small Business Subcontracting Plan, clause of this contract.

(a) *Definitions. Historically black colleges and universities*, as used in this clause, means institutions determined by the Secretary of Education to meet the requirements of 34 CFR 608.2. The term also means any nonprofit research institution that was an integral part of such a college or university before November 14, 1986.

Minority institutions, as used in this clause, means institutions meeting the requirements of section 1046(3) of the Higher Education Act of 1965 (20 U.S.C. 1135d-5(3)). The term also includes Hispanic-serving institutions as defined in section 316(b)(1) of such Act (20 U.S.C. 1059c(b)(1)).

(b) Except for company or division-wide commercial items subcontracting plans, the term *small disadvantaged business*, when used in the FAR 52.219-9 clause, includes historically black colleges and universities and minority institutions, in addition to small disadvantaged business concerns.

(c) Work under the contract or its subcontracts shall be credited toward meeting the small disadvantaged business concern goal required by paragraph (d) of the FAR 52.219-9 clause when:

(1) It is performed on Indian lands or in joint venture with an Indian tribe or a tribally-owned corporation, and

(2) It meets the requirements of 10 U.S.C. 2323a.

(d) Subcontracts awarded to workshops approved by the Committee for Purchase from People Who are Blind or Severely Disabled (41 U.S.C. 46-48), may be counted toward the Contractor's small business subcontracting goal.

(e) A mentor firm, under the Pilot Mentor-Protege Program established under Section 831 of Pub. L. 101-510, as amended, may count toward its small disadvantaged business goal, subcontracts awarded--

(f) The master plan approval referred to in paragraph (f) of the FAR 52.219-9 clause is approval by the Contractor's cognizant contract administration activity.

(g) In those subcontracting plans which specifically identify small, small disadvantaged, and women-owned small businesses, the Contractor shall notify the Administrative Contracting Officer of any substitutions of firms that are not small, small disadvantaged, or women-owned small businesses for the firms listed in the subcontracting plan. Notifications shall be in writing and shall occur within a reasonable period of time after award of the subcontract. Contractor-specified formats shall be acceptable.

(End of clause)

52.223-7001 HAZARD WARNING LABELS (DEC 1991)

(a) "Hazardous material," as used in this clause, is defined in the Hazardous Material Identification and Material Safety Data clause of this contract.

(b) The Contractor shall label the item package (unit container) of any hazardous material to be delivered under this contract in accordance with the Hazard Communication Standard (29 CFR 1910.1200 et seq). The Standard requires that the hazard warning label conform to the requirements of the standard unless the material is otherwise subject to the labeling requirements of one of the following statutes:

(1) Federal Insecticide, Fungicide and Rodenticide Act;

(2) Federal Food, Drug and Cosmetics Act;

(3) Consumer Product Safety Act;

(4) Federal Hazardous Substances Act; or

(5) Federal Alcohol Administration Act.

(c) The Offeror shall list which hazardous material listed in the Hazardous Material Identification and Material Safety Data clause of this contract will be labeled in accordance with one of the Acts in paragraphs (b)(1) through (5) of this clause instead of the Hazard Communication Standard. Any hazardous material not listed will be interpreted to mean that a label is required in accordance with the Hazard Communication Standard.

MATERIAL (If None, Insert "None.")

ACT

(d) The apparently successful Offeror agrees to submit, before award, a copy of the hazard warning label for all hazardous materials not listed in paragraph (c) of this clause. The Offeror shall submit the label with the Material Safety Data Sheet being furnished under the Hazardous Material Identification and Material Safety Data clause of this contract.

(e) The Contractor shall also comply with MIL-STD-129, Marking for Shipment and Storage (including revisions adopted during the term of this contract).

(End of clause)

252.223-7004 DRUG-FREE WORK FORCE (SEP 1988)

(a) Definitions.

(1) "Employee in a sensitive position," as used in this clause, means an employee who has been granted access to classified information; or employees in other positions that the Contractor determines involve national security; health or safety, or functions other than the foregoing requiring a high degree of trust and confidence.

(2) "Illegal drugs," as used in this clause, means controlled substances included in Schedules I and II, as defined by section 802(6) of title 21 of the United States Code, the possession of which is unlawful under chapter 13 of that Title. The term "illegal drugs" does not mean the use of a controlled substance pursuant to a valid prescription or other uses authorized by law.

(b) The Contractor agrees to institute and maintain a program for achieving the objective of a drug-free work force. While this clause defines criteria for such a program, contractors are encouraged to implement alternative approaches comparable to the criteria in paragraph (c) that are designed to achieve the objectives of this clause.

(c) Contractor programs shall include the following, or appropriate alternatives:

(1) Employee assistance programs emphasizing high level direction, education, counseling, rehabilitation, and coordination with available community resources;

(2) Supervisory training to assist in identifying and addressing illegal drug use by Contractor employees;

(3) Provision for self-referrals as well as supervisory referrals to treatment with maximum respect for individual confidentiality consistent with safety and security issues;

(4) Provision for identifying illegal drug users, including testing on a controlled and carefully monitored basis. Employee drug testing programs shall be established taking account of the following:

(i) The Contractor shall establish a program that provides for testing for the use of illegal drugs by employees in sensitive positions. The extent of and criteria for such testing shall be determined by the Contractor based on considerations that include the nature of the work being performed under the contract, the employee's duties, and efficient use of Contractor resources, and the risks to health, safety, or national security that could result from the failure of an employee adequately to discharge his or her position.

(ii) In addition, the Contractor may establish a program for employee drug testing--

(A) When there is a reasonable suspicion that an employee uses illegal drugs; or

(B) When an employee has been involved in an accident or unsafe practice;

(C) As part of or as a follow-up to counseling or rehabilitation for illegal drug use;

(D) As part of a voluntary employee drug testing program.

(iii) The Contractor may establish a program to test applicants for employment for illegal drug use.

(iv) For the purpose of administering this clause, testing for illegal drugs may be limited to those substances for which testing is prescribed by section 2.1 of subpart B of the "Mandatory Guidelines for Federal Workplace Drug Testing Programs" (53 FR 11980 (April 11, 1988), issued by the Department of Health and Human Services.

(d) Contractors shall adopt appropriate personnel procedures to deal with employees who are found to be using drugs illegally. Contractors shall not allow any employee to remain on duty or perform in a sensitive position who is found to use illegal drugs until such times as the Contractor, in accordance with procedures established by the Contractor, determines that the employee may perform in such a position.

(e) The provisions of this clause pertaining to drug testing program shall not apply to the extent that are inconsistent with state or local law, or with an existing collective bargaining agreement; provided that with respect to the latter, the Contractor agrees those issues that are in conflict will be a subject of negotiation at the next collective bargaining session.

(End of clause)

252.225-7001 BUY AMERICAN ACT AND BALANCE OF PAYMENTS PROGRAM (MAR 1998)

(a) Definitions.

As used in this clause--

(1) Components means those articles, materials, and supplies directly incorporated into end products.

(2) Domestic end product means--

(i) An unmanufactured end product that has been mined or produced in the United States; or

(ii) An end product manufactured in the United States if the cost of its qualifying country components and its components that are mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. The cost of components shall include transportation costs to the place of incorporation into the end product and U.S. duty (whether or not a duty-free entry certificate may be issued). A component shall be considered

to have been mined, produced, or manufactured in the United States (regardless of its source in fact) if the end product in which it is incorporated is manufactured in the United States and the component is of a class or kind--

(A) Determined to be not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities and of a satisfactory quality; or

(B) That the Secretary concerned determines would be inconsistent with the public interest to apply the restrictions of the Buy American Act.

(3) End product means those articles, materials, and supplies to be acquired for public use under the contract. For this contract, the end products are the line items to be delivered to the Government (including supplies to be acquired by the Government for public use in connection with service contracts, but excluding installation and other services to be performed after delivery).

(4) Nonqualifying country end product means an end product that is neither a domestic end product nor a qualifying country end product.

(5) Qualifying country means any country set forth in subsection 225.872-1 of the Defense Federal Acquisition Regulation Supplement.

(6) Qualifying country component means an item mined, produced, or manufactured in a qualifying country.

(7) Qualifying country end product means--

(i) An unmanufactured end product mined or produced in a qualifying country; or

(ii) An end product manufactured in a qualifying country if the cost of the components mined, produced, or manufactured in the qualifying country and its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components.

(b) This clause implements the Buy American Act (41 U.S.C. Section 10a-d) in a manner that will encourage a favorable international balance of payments by providing a preference to domestic end products over other end products, except for end products which are qualifying country end products.

(c) The Contractor agrees that it will deliver only domestic end products unless, in its offer, it specified delivery of other end products in the Buy American Act--Balance of Payments Program Certificate provision of the solicitation. An offer certifying that a qualifying country end product will be supplied requires the Contractor to deliver a qualifying country end product or a domestic end product.

(d) The offered price of qualifying country end products should not include custom fees or duty. The offered price of nonqualifying country end products, and products manufactured in the United States that contain nonqualifying country components, must include all applicable duty. The award price will not include duty for end products or components that are to be accorded duty-free entry. Generally, when the Buy American Act is applicable, each nonqualifying country offer is adjusted for the purpose of evaluation by adding 50 percent of the offer, inclusive of duty.

252.225-7041 CORRESPONDENCE IN ENGLISH (JUNE 1997)

The Contractor shall ensure that all contract correspondence that is addressed to the United States Government is submitted in English or with an English translation.

(End of clause)

252.231-7000 SUPPLEMENTAL COST PRINCIPLES (DEC 1991)

When the allowability of costs under this contract is determined in accordance with part 31 of the Federal Acquisition Regulation (FAR), allowability shall also be determined in accordance with part 231 of the Defense FAR Supplement, in effect on the date of this contract.

252.236-7000 MODIFICATION PROPOSALS - PRICE BREAKDOWN. (DEC 1991)

(a) The Contractor shall furnish a price breakdown, itemized as required and within the time specified by the Contracting Officer, with any proposal for a contract modification.

(b) The price breakdown --

(1) Must include sufficient detail to permit an analysis of profit, and of all costs for --

(i) Material;

(ii) Labor;

(iii) Equipment;

(iv) Subcontracts; and

(v) Overhead; and

(2) Must cover all work involved in the modification, whether the work was deleted, added, or changed.

(c) The Contractor shall provide similar price breakdowns to support any amounts claimed for subcontracts.

(d) The Contractor's proposal shall include a justification for any time extension proposed.

252.243-7001 PRICING OF CONTRACT MODIFICATIONS (DEC 1991)

When costs are a factor in any price adjustment under this contract, the contract cost principles and procedures in FAR part 31 and DFARS part 231, in effect on the date of this contract, apply.

AFARS 4.9002 Reporting of Contractor Manpower Data Elements (DEC 2000)

(a) Scope. The following sets forth contractual requirements, and related policies and procedures, for reporting of contractor labor work year equivalents (also called Contractor Man-year Equivalents (CMEs)) in support of the Army, pursuant to 10 U.S.C. 129a, 10 U.S.C. 2461(g), and Section 343 of Public Law 106-65. Reporting shall be accomplished electronically by direct contractor submission to a secure Army Web Site: <https://contractormanpower.us.army.mil/>.

(b) Purpose. The purpose of this reporting requirement is to respond to Congressional requests; significantly improve reports to Congress and to internal Army manpower and force management planners and decisionmakers; and, to broadly quantify the extent of CMEs used to support Army operations and management under the Federal Supply Class and Service Codes for "Research and Development" and "Other Services and Construction." The Army's objective is to collect as much significant CME data as possible to allow accurate reporting to Congress and for Army planning purposes. The reporting data elements should not be viewed as an "all or nothing" requirement. Even partial reporting, e.g., direct labor hours, appropriation data, place of performance, Army customer, etc., will be helpful.

(c) Applicability. This reporting requirement applies only to services covered by Federal Supply Class or Service codes for "Research and Development," and "Other Services and Construction." If the contractor is uncertain of the coding of the services performed under this contract/order, or the scope and frequency of reporting, guidance may be obtained from the Army Web Site Help Desk, other HQDA contacts cited at the Web Site, or from the contracting officer. Classified contract actions are not, per se, exempt from this requirement. Report submissions shall not contain classified information.

(d) Requirements. The contractor is required to report the following contractor manpower information, associated with performance of this contract action in support of Army requirements, to the Office, Assistant Secretary of the Army (Manpower and Reserve Affairs), using the secure Army data collection web-site at <https://contractormanpower.us.army.mil/>:

(1) Direct Labor. Direct labor hours and the value of those hours;

(2) Indirect Labor. Composite indirect labor hours associated with the reported direct hours, and the value of those indirect labor hours plus compensation related costs for direct labor hours ordinarily included in the indirect pools; or two distinct, relevant annual composite or average indirect labor rates. If used in lieu of raw indirect labor hours and the value of those indirect hours, the rates may be annualized average estimates for the reporting contractor and need not be developed for each reporting period.

(i) Composite Indirect Rate for Indirect Manhours. If provided, the composite indirect labor rate will be used to grossly estimate the number of indirect hours associated with services reported in each period, when multiplied by the reported direct labor hours.

(ii) Composite Indirect Rate for Compensation Value. If provided, a different composite indirect labor rate will be used to grossly estimate the value of compensation related charges not included in the value of direct labor charges, when multiplied by the reported direct labor value. This rate shall include: salaries and wages for indirect labor hours; directors' fees; bonuses (including stock); incentive awards; employee stock options; stock appreciation rights; employee insurance, fringe benefits (e.g., vacation, sick leave, holidays, military leave, supplemental unemployment benefit plans); contributions to pension plans (defined benefit, defined contribution); other post-retirement benefits, annuity, and employee incentive compensation and deferred compensation plans; early retirement plans; off-site pay; incentive pay; hardship pay; severance pay; and COLA differential; (iii) Actual Estimated Indirect Labor Hours and Value(s). Contractors may choose to report estimated total hours and dollars for indirect labor (related to the reported direct labor) and compensation charges not reported as direct labor charges (as opposed to providing average composite rates). Either method chosen should be consistently reported.

(e) Reporting Exemption(s). In the rare event the contractor is unable to comply with these reporting requirements without creating a whole new cost allocation system or system of records (such as a payroll accounting system), or due to similar insurmountable practical or economic reasons, the contractor may claim an exemption to at least a portion of the reporting requirement by certifying in writing to the contracting officer the clear underlying reason(s) for exemption from the specified report data elements, and further certifying that they do not otherwise have to provide the exempted information, in any form, to the United States Government. This certification is subject to audit and potential legal action under Title 18, United States Code. The contractor may not claim an exemption on the sole basis that they are a foreign contractor; that services are provided pursuant to a firm fixed price or time and materials contract or similar instrument; or on the basis that they have sub-contracted their payroll system, or have too many subcontractors. If the contracting officer, by written notice, determines that the "self-exemption" is lacking in basis or credibility, the contractor shall comply with the subsequent direction of the contracting officer, whose decision is final in this matter.

(f) Uses and Safeguarding of Information. The information submitted will be treated as contractor proprietary information when associated with a contractor name or contract number. The Assistant Secretary of the Army (Manpower and Reserve Affairs) will oversee the aggregation of this information and will exclude contract number and contractor name from any use of this data (except as necessary for internal Army verification and validation measures). The planning factor(s) derived from this data by ASA (M&RA) and its contract support (if any) will be used solely for Army manpower planning purposes and will not be applied to any specific acquisition(s). Detailed data by contract number and name will not be released to any Governmental entity other than ASA (M&RA), except for purposes of assessing compliance with the reporting requirement itself, and will only be used for the stated purposes (reporting and planning). Any potentially sensitive data released within the Army or to its contractor will

be clearly marked as Contractor Proprietary. Non-sensitive roll-up information may eventually be published for public inspection after such data has been validated as deemed appropriate.

(g) Sub-Contractor(s). The contractor shall ensure that all reportable sub-contractor data is timely reported to the data collection web site (citing this contract/order number). At the discretion of the prime contractor, this reporting may be done directly by subcontractors to the data collection site; or by the prime contractor after consolidating and rationalizing all significant data from their sub-contractors.

(h) Report schedule. The contractor is required to report the required information to the Office of the Assistant Secretary of the Army (Manpower and Reserve Affairs) data collection web site generally contemporaneous with submission of a request for payment (for example, voucher, invoice, or request for progress payment), but not less frequently than quarterly, retroactive to October 1, 1999, or the start of the contract/order, whichever is later. Deviation from this schedule requires approval of the contracting officer.

(i) Reporting format. The information required should be reported electronically to the M&RA data collection point, at <https://contractormanpower.us.army.mil>. This web site identifies and explains all the mandatory data elements and format required to assure reliable and consistent collection of the data required by law, and includes, but is not limited to, identification of the information collected pursuant to Sec. 668.2(d)(1) and (2) as related to:

(1) Reporting to Congress or Army Leadership. Data elements required for reports to Congress and Army manpower planning, such as: the applicable federal supply class or service code, appropriation data (and estimated value for each appropriation where more than one appropriation funds a contract), major Army organizational element receiving or reviewing the work, and place of performance/theater of operation where contractor performs the work.

(2) Data Credibility. Data elements required for purposes of assuring credible and consistent reporting and general compliance with the reporting requirement, such as: beginning and ending dates for reporting period; contract number (including task or delivery order number); name and address of contracting office; name, address and point of contact for contractor; and total estimated value of contract.

(j) Reporting Flexibility. Contractors are encouraged to communicate with the help desk identified at the data collection web site to resolve reporting difficulties. The web site reporting pages include a "Remarks" field to accommodate non-standard data entries if needed to facilitate simplified reporting and to minimize reporting burdens arising out of unique circumstances. For example, contractors may use the remarks field to identify multiple delivery orders associated with a single data submission or record, so long as the contract number, federal supply or service code, major Army organizational element receiving or reviewing the work, and contracting office are the same for the reporting period for that set of delivery orders, rather than entering a separate data submission or record for each individual delivery order. Subcontract data may also be consolidated in a single report for a reporting period. Other changes to facilitate reporting may be authorized by the contracting officer or the Help Desk (under Army policy direction and oversight).

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SECTION J

LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

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ATTACHMENT	TITLE
J1	DRAWING INDEX
J2	CONTRACT DATA REQUIREMENTS LIST – DD FORM 1423
J3	INSTRUCTIONS FOR COMPLETING DD FORM 1423
<u>J4</u>	<u>DETAIL DRAWINGS (BOUND IN THE SPECIFICATIONS)</u>

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Attachment J1

DRAWING INDEX

SHEET NUMBER	DRAWING NUMBER	TITLE	REVISION NUMBER	DATE
<u>PROJECT DRAWINGS</u>				
1	NWP-5.1-0-0/1	Cover Sheet & Drawing Index		
2	NWP-5-0-0/2	Typical Generator Breaker Control Diagram		
3	NWP-5.1-0-0/3	Project Location and Vicinity Map (Chief Joseph)		
4	NWP-5.1-0-0/4	Project Location and Vicinity Map (Libby)		
5	NWP-5.1-0-0/5	Project Location and Vicinity Map (Lower Granite)		
6	NWP-5.1-0-0/6	Project Location and Vicinity Map (Little Goose)		
7	NWP-5.1-0-0/7	Project Location and Vicinity Map (Lower Monumental)		
8	NWP-5.1-0-0/8	Project Location and Vicinity Map (The Dalles)		
9	NWP-5.1-0-0/9	Project Location and Vicinity Map (Bonneville II)		
10	NWP-5.1-0-0/10	Project Location and Vicinity Map (Dworshak)		
11	NWP-5.1-0-0/11	Project Location and Vicinity Map (John Day)		
12	NWP-5.1-0-0/12	Project Location and Vicinity Map (McNary)		

SHEET NUMBER	DRAWING NUMBER	TITLE	REVISION NUMBER	DATE
<u>REFERENCE DRAWINGS</u>				
Chief Joseph				
	CJP-6-0-0/2	Plan El. 810	1	09/15/52
	CJP-6-0-0/10	Transverse Section Bays 21 thru 27		12/15/52
	CJP-1.4-6-1A6/5	15 kV Equipment Sheet 1		11/22/54
	CJP-1.4-6-1A5/7	15 kV Equipment Sheet 3		11/22/54
Libby				
	LDP-1-6-1A6/7	15 kV Equipment Plans & Sections	1	09/15/52
	LDP-1-6-1A6/8	Plans El. 2135.5 and El. 2148.0	K	04/07/76
	LDP-6-0-0/5	Plan El. 2148 Bays 1-4	G	04/07/76
Dworshak				
	DWP-1-6-1A6/7	15 kV Equipment Sheet 1		04/14/69
	DWP-1-6-1A6/8	15 kV Equipment Sheet 2		04/14/69
	DWP-1-3-8/5	Embedded Piping, Bays 1, 2 & 3 El. 1005 Upstream	C	09/18/74
Lower Granite (Units 1-3)				
	GDP-6-0-0/11	Generator Bay Plan Gallery Els. 678 & 721		As Constructed
	GDP-1-6-IE11/5	Main Units Intake Gallery El. 721	B	09/01/76
	GDP-1-6-1A11/3	Metal Tray System Schematic Diagram	A	06/19/76
Lower Monumental (Units 1-3)				
SEE LITTLE GOOSE AND LOWER GRANITE (UNIT 1-3) - LOWER MONUMENTAL UNIT 1-3 DRAWINGS ARE SIMILAR				

SHEET NUMBER	DRAWING NUMBER	TITLE	REVISION NUMBER	DATE
Lower Monumental (Units 4-6)				
LMP-1.8-6-1A6/1	15 kV Equipment Sheet 1		B	05/05/75
LMP-1.8-6-1A6/2	15 kV Equipment Sheet 2		B	05/05/75
LMP-1.8-0-0/15	Intake Deck - El. 553 and Galleries El. 523 & El. 482			03/07/75
Little Goose (Units 1-3)				
LGP-1.1-6-1A6/1	15 kV Equipment Sheet 1		A	09/20/68
LMP-1.1-6-1A6/2	15 kV Equipment Sheet 2		A	09/20/68
The Dalles				
DDP-1-6-IE/6	US Gallery - Piers F1 to P4 Plan El. 111.5		5	04/15/57
DDP-1-6-1G/6	US Gallery - Piers P4 to S1 Plan El. 111.5		4	04/15/57
DDP-1-6-1J/6	US Gallery - Piers P9 to P13 Plan El. 111.5		5	04/14/57
DDP-1-6-IL/6	US Gallery - Piers P13 to P15 Plan El. 111.5 & Details		6	04/15/57
DDP-1-6-IM/6	Main Unit Bays 15, 16, 17, 18 Upstr. Gallery - Plan El. 111.5		4	01/27/58
DDP-1.1-6-1P/6	Main Unit Bays 19, 20, 21, 22 Upstr. Gallery - Plan El. 111.5		4	01/24/58
Bonneville Second Powerhouse				
BDP-1-6-1A6/1	14.4 kV Bus & Switchgear Main Units - Plan			
BDP-1-6-1A6/2	14.4 kV Bus & Switchgear Main Unit - Sect & Details – SH1			
BDP-1-6-1A6/3	14.4 kV Bus & Switchgear Main Unit - Sect & Details - SH2			

SHEET NUMBER	DRAWING NUMBER	TITLE	REVISION NUMBER	DATE
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McNary Lock and Dam

MDP-2.2-6-1E6/4	15 kV Equipment Typical Installation Details		3FEB 53
-----------------	----------------------------------------------	--	---------

John Day

JDP-1.1-6-1A6/3	15 kV Equipment Sheet 1		5JAN 66
JDP-1.1-6-1A6/4	15 kV Equipment Sheet 2		5JAN 66
JDP-1.1-6-1A6/5	15 kV Equipment Sheet 3		28JAN 66
JDP-1.1-6-IE11/5	Main Units 1-4 Intake Gallery - El. 251	5	15OCT 75
JDP-1.1-6-IJ11/3	Main Units 9-12 Intake Gallery - El. 251	3	15OCT 75
JDP-1.1-6-IL11/3	Main Units 13-16 Intake Gallery - El. 251	3	15OCT 75

[DETAIL DRAWINGS \(BOUND IN THE SPECIFICATIONS\)](#)

[Refer to Attachment J4 DETAIL DRAWINGS \(BOUND IN THE SPECIFICATIONS\)](#)

Attachment J2

CONTRACT DATA REQUIREMENTS LIST

DD FORM 1423

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CONTRACT DATA REQUIREMENTS LIST												FORM APPROVED OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 440 hours per response including the time for reviewing instructions, searching existing data gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government issuing Contracting Officer for the Contract/PR No. listed in Block 6.													
A. Contract Line Item No.				B. Exhibit B		C. Category: TPD TM OTHER		Contract Data					
D. System/Item MAIN UNIT CIRCUIT BREAKER REPLACEMENT								E. Contract/PR No.		F: Contractor			
1. Data Item No. B001				2. Title of Data Item Weekly Coordination Meeting Minutes				3. Subtitle SD- 09					
4. Authority (Data Acquisition Document No.)				5. Contract Reference SECTION 01010, para 1. 3				6. Requiring Office CENWP- HDC- P					
7. DD 250 REQ		9. Dist. Statement Required		10. Frequency ASREQ		12. Date of First Submission See Block 16		14. Distribution					
8. APP Code		11. As of Date		13. Date of Subsequent Submission		a. Addressee		Draft		b. Copies		Final	
										Reg		Repro	
16. Remarks Within 3 days of the meeting.								CENWP- HDC- P				2	
								15. Total ----->		2		0	
1. Data Item No. B002				2. Title of Data Item Contractor's Work Supervisors Qualification				3. Subtitle SD- 09 Reports					
4. Authority (Data Acquisition Document No.)				5. Contract Reference SECTION 01010, para 1. 3				6. Requiring Office CENWP- HDC- P					
7. DD 250 REQ		9. Dist. Statement Required		10. Frequency		12. Date of First Submission See Block 16		14. Distribution					
8. APP Code		11. As of Date		13. Date of Subsequent Submission		a. Addressee		Draft		b. Copies		Final	
										Reg		Repro	
16. Remarks Minimum of 30 days prior to start of site work.								CENWP- HDC- P				2	
								15. Total ----->		2		0	
1. Data Item No. B003				2. Title of Data Item Crane Operator(s) Qualifications				3. Subtitle SD- 09 Reports					
4. Authority (Data Acquisition Document No.)				5. Contract Reference SECTION 01010, para 1. 3				6. Requiring Office CENWP- HDC- P					
7. DD 250 REQ		9. Dist. Statement Required		10. Frequency		12. Date of First Submission See Block 16		14. Distribution					
8. APP Code		11. As of Date		13. Date of Subsequent Submission		a. Addressee		Draft		b. Copies		Final	
										Reg		Repro	
16. REMARKS Minimum of 30 days prior to start of site work.								CENWP- HDC- P				2	
								15. Total ----->		2		0	
1. Data Item No. B004				2. Title of Data Item Equipment/product warranty list				3. Subtitle SD- 18 Records					
4. Authority (Data Acquisition Document No.)				5. Contract Reference SECTION 01770, para. 1. 3				6. Requiring Office CENWP- HDC- P					
7. DD 250 REQ		9. Dist. Statement Required		10. Frequency		12. Date of First Submission See Block 16		14. Distribution					
8. APP Code		11. As of Date		13. Date of Subsequent Submission		a. Addressee		Draft		b. Copies		Final	
										Reg		Repro	
16. Remarks Upon completion of the work for an individual task order.								CENWP- HDC- P					
								15. Total ----->					
G. Prepared By				H. Date		I. Approve By				J. Date			

CONTRACT DATA REQUIREMENTS LIST**FORM APPROVED**
OMB No. 0704-0188

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A. Contract Line Item No.				B. Exhibit B		C. Category: Contract Data TPD <input type="checkbox"/> TM <input type="checkbox"/> OTHER <input type="checkbox"/>			
D. System/Item MAIN UNIT CIRCUIT BREAKER REPLACEMENT				E. Contract/PR No.		F: Contractor			
1. Data Item No. B005		2. Title of Data Item As-built drawings				3. Subtitle			
4. Authority (Data Acquisition Document No.)				5. Contract Reference SECTION 01770, para. 1.2			6. Requiring Office CENWP- HDC- P		
7. DD 250 REQ	9. Dist. Statement Required	10. Frequency	12. Date of First Submission	14. Distribution					
			See Block 16						
8. APP Code A		11. As of Date	13. Date of Subsequent Submission	a. Addressee	Draft	b. Copies			
						Final	Reg	Repro	
16. Remarks Upon completion of the work for an individual task order.				CENWP- HDC- P		2	0		
				15. Total ----->		2	0		
1. Data Item No. B006		2. Title of Data Item Environmental Protection Plan				3. Subtitle SD- 01 Data			
4. Authority (Data Acquisition Document No.)				5. Contract Reference SECTION 01350, para 1.3			6. Requiring Office CENWP- HDC- P		
7. DD 250 REQ	9. Dist. Statement Required	10. Frequency	12. Date of First Submission	14. Distribution					
			10 DAC						
8. APP Code A		11. As of Date	13. Date of Subsequent Submission	a. Addressee	Draft	b. Copies			
						Final	Reg	Repro	
16. Remarks				CENWP- HDC- P					
				15. Total ----->					
1. Data Item No. B007		2. Title of Data Item Detail Drawings				3. Subtitle SD- 04 Drawings			
4. Authority (Data Acquisition Document No.)				5. Contract Reference SECTION 05101, para. 1.3			6. Requiring Office CENWP- HDC- P		
7. DD 250 REQ	9. Dist. Statement Required	10. Frequency	12. Date of First Submission	14. Distribution					
			See Block 16						
8. APP Code A		11. As of Date	13. Date of Subsequent Submission	a. Addressee	Draft	b. Copies			
						Final	Reg	Repro	
16. REMARKS Prior to fabrication.				CENWP- HDC- P		2	0		
				15. Total ----->		2	0		
1. Data Item No. B008		2. Title of Data Item Welding Procedures for Structural Steel				3. Subtitle SD- 08 Statements			
4. Authority (Data Acquisition Document No.)				5. Contract Reference SECTION 05101, para. 1.3			6. Requiring Office CENWP- HDC- P		
7. DD 250 REQ	9. Dist. Statement Required	10. Frequency ASREQ	12. Date of First Submission	14. Distribution					
			See Block 16						
8. APP Code A		11. As of Date	13. Date of Subsequent Submission	a. Addressee	Draft	b. Copies			
						Final	Reg	Repro	
16. Remarks Prior to commencing fabrication.				CENWP- HDC- P		2	0		
				15. Total ----->		2	0		
G. Prepared By				H. Date		I. Approve By		J. Date	

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A. Contract Line Item No.				B. Exhibit B		C. Category: Contract Data TPD _____ TM _____ OTHER _____			
D. System/Item MAIN UNIT CIRCUIT BREAKER REPLACEMENT				E. Contract/PR No.		F: Contractor			
1. Data Item No. B009		2. Title of Data Item Structural Steel Welding Repairs				3. Subtitle SD-08 Statements			
4. Authority (Data Acquisition Document No.)				5. Contract Reference SECTION 05101, para 1.3				6. Requiring Office CENWP- HDC- P	
7. DD 250 REC	9. Dist. Statement Required	10. Frequency	12. Date of First Submission	14. Distribution					
			See Block 16						
8. APP Code A		11. As of Date	13. Date of Subsequent Submission	a. Addressee	Draft	b. Copies			
						Final			
						Reg		Repro	
16. Remarks Prior to making repairs.				CENWP- HDC- P		2		0	
				15. Total ----->		2		0	
1. Data Item No. B010		2. Title of Data Item Tests, Inspections, and Verifications				3. Subtitle SD-09 Reports			
4. Authority (Data Acquisition Document No.)				5. Contract Reference SECTION 05101, para 1.3				6. Requiring Office CENWP- HDC- P	
7. DD 250 REC	9. Dist. Statement Required	10. Frequency	12. Date of First Submission	14. Distribution					
8. APP Code		11. As of Date	13. Date of Subsequent Submission	a. Addressee	Draft	b. Copies			
						Final			
						Reg		Repro	
16. Remarks				CENWP- HDC- P		2		0	
				15. Total ----->		2		0	
1. Data Item No. B011		2. Title of Data Item Qualification of Welders and Welding Operators				3. Subtitle SD-13 Certificates			
4. Authority (Data Acquisition Document No.)				5. Contract Reference SECTION 05101, para 1.3				6. Requiring Office CENWP- HDC- P	
7. DD 250 REC	9. Dist. Statement Required	10. Frequency	12. Date of First Submission	14. Distribution					
			See Block 16						
8. APP Code		11. As of Date	13. Date of Subsequent Submission	a. Addressee	Draft	b. Copies			
						Final			
						Reg		Repro	
16. REMARKS Prior to commencing fabrication.				CENWP- HDC- P		2		0	
				15. Total ----->		2		0	
1. Data Item No. B012		2. Title of Data Item Reserved				3. Subtitle			
4. Authority (Data Acquisition Document No.)				5. Contract Reference				6. Requiring Office	
7. DD 250 REC	9. Dist. Statement Required	10. Frequency	12. Date of First Submission	14. Distribution					
8. APP Code		11. As of Date	13. Date of Subsequent Submission	a. Addressee	Draft	b. Copies			
						Final			
						Reg		Repro	
16. Remarks									
				15. Total ----->					
G. Prepared By				H. Date		I. Approve By		J. Date	

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A. Contract Line Item No.				B. Exhibit B		C. Category: Contract Data TPD <input type="checkbox"/> TM <input type="checkbox"/> OTHER <input type="checkbox"/>					
D. System/Item MAIN UNIT CIRCUIT BREAKER REPLACEMENT				E. Contract/PR No.		F: Contractor					
1. Data Item No. B013		2. Title of Data Item Reserved				3. Subtitle					
4. Authority (Data Acquisition Document No.)				5. Contract Reference			6. Requiring Office				
7. DD 250 REC		9. Dist. Statement Required		10. Frequency		12. Date of First Submission		14. Distribution			
8. APP Code				11. As of Date		13. Date of Subsequent Submission		a. Addressee		b. Copies	
								Draft		Final	
										Reg	
										Repro	
16. Remarks										2	
										0	
										2	
										0	
1. Data Item No. B014		2. Title of Data Item Reserved				3. Subtitle					
4. Authority (Data Acquisition Document No.)				5. Contract Reference			6. Requiring Office				
7. DD 250 REC		9. Dist. Statement Required		10. Frequency		12. Date of First Submission		14. Distribution			
8. APP Code				11. As of Date		13. Date of Subsequent Submission		a. Addressee		b. Copies	
								Draft		Final	
										Reg	
										Repro	
16. Remarks											
										2	
										0	
1. Data Item No. B015		2. Title of Data Item Electrical Equipment				3. Subtitle SD-01 Data					
4. Authority (Data Acquisition Document No.)				5. Contract Reference SECTION 16050, para. 1.3. a-g			6. Requiring Office CENWP- HDC- P				
7. DD 250 REC		9. Dist. Statement Required		10. Frequency		12. Date of First Submission See Block 16		14. Distribution			
8. APP Code A				11. As of Date		13. Date of Subsequent Submission		a. Addressee		b. Copies	
								Draft		Final	
										Reg	
										Repro	
16. REMARKS Within 30 days after receipt of signed task order.								CENWP- HDC- P		2	
										0	
										2	
										0	
1. Data Item No. B016		2. Title of Data Item Wire and Cable				3. Subtitle SD-01 Data					
4. Authority (Data Acquisition Document No.)				5. Contract Reference SECTION 16050, para. 1.3			6. Requiring Office CENWP- HDC- P				
7. DD 250 REC		9. Dist. Statement Required		10. Frequency		12. Date of First Submission See Block 16		14. Distribution			
8. APP Code A				11. As of Date		13. Date of Subsequent Submission		a. Addressee		b. Copies	
								Draft		Final	
										Reg	
										Repro	
16. Remarks Within 30 days after receipt of signed task order.								CENWP- HDC- P		2	
										0	
										2	
										0	
G. Prepared By				H. Date		I. Approve By		J. Date			

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A. Contract Line Item No.				B. Exhibit B		C. Category: Contract Data TPD <input type="checkbox"/> TM <input type="checkbox"/> OTHER <input type="checkbox"/>			
D. System/Item MAIN UNIT CIRCUIT BREAKER REPLACEMENT				E. Contract/PR No.		F: Contractor			
1. Data Item No. B017		2. Title of Data Item Drawings, diagrams and schedules				3. Subtitle SD- 04 Drawings			
4. Authority (Data Acquisition Document No.)				5. Contract Reference SECTION 16050, para. 1. 3				6. Requiring Office CENWP- HDC- P	
7. DD 250 REC	9. Dist. Statement Required	10. Frequency	12. Date of First Submission	14. Distribution					
			See Block 16						
8. APP Code A		11. As of Date	13. Date of Subsequent Submission	a. Addressee	Draft	b. Copies			
						Final	Reg	Repro	
16. Remarks Within 30 days after receipt of signed task order.				CENWP- HDC- P		3	0		
				15. Total ----->		3	0		
1. Data Item No. B018		2. Title of Data Item Reserved				3. Subtitle			
4. Authority (Data Acquisition Document No.)				5. Contract Reference				6. Requiring Office	
7. DD 250 REC	9. Dist. Statement Required	10. Frequency	12. Date of First Submission	14. Distribution					
8. APP Code		11. As of Date	13. Date of Subsequent Submission	a. Addressee	Draft	b. Copies			
						Final	Reg	Repro	
16. Remarks order.						2	0		
				15. Total ----->		2	0		
1. Data Item No. B019		2. Title of Data Item Wire and Cable Factory Tests, Inspections, and Verifications				3. Subtitle SD- 09 Reports			
4. Authority (Data Acquisition Document No.)				5. Contract Reference SECTION 16050, para. 1. 3				6. Requiring Office CENWP- HDC- P	
7. DD 250 REC	9. Dist. Statement Required	10. Frequency	12. Date of First Submission	14. Distribution					
			See Block 16						
8. APP Code A		11. As of Date	13. Date of Subsequent Submission	a. Addressee	Draft	b. Copies			
						Final	Reg	Repro	
16. REMARKS Within 30 days after receipt of signed task order.				CENWP- HDC- P		2	0		
				15. Total ----->		2	0		
1. Data Item No. B020		2. Title of Data Item Wire and Cable Field Tests				3. Subtitle SD- 09 Reports			
4. Authority (Data Acquisition Document No.)				5. Contract Reference SECTION 16050, para. 1. 3				6. Requiring Office CENWP- HDC- P	
7. DD 250 REC	9. Dist. Statement Required	10. Frequency	12. Date of First Submission	14. Distribution					
			See Block 16						
8. APP Code A		11. As of Date	13. Date of Subsequent Submission	a. Addressee	Draft	b. Copies			
						Final	Reg	Repro	
16. Remarks Within 15 days after completion of tests.				CENWP- HDC- P		2	0		
				15. Total ----->		2	0		
G. Prepared By			H. Date		I. Approve By		J. Date		

FORM APPROVED
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A. Contract Line Item No.	B. Exhibit B	C. Category: Contract Data TPD _____ TM _____ OTHER _____
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1. Data Item No. B021	2. Title of Data Item Wire Markers	3. Subtitle SD- 09 Reports
---------------------------------	----------------------------------------------	--------------------------------------

7. DD 250 REC	9. Dist. Statement Required	10. Frequency	12. Date of First Submission See Block 16	14. Distribution	
					b. Copies

16. Remarks	CENWP- HDC- P	2	0
Within 15 days after completion of tests.			

1. Data Item No. B022	2. Title of Data Item Operational Field Tests	3. Subtitle SD-09 Reports
---------------------------------	---------------------------------------------------------	-------------------------------------

7. DD 250 REC	9. Dist. Statement Required	10. Frequency	12. Date of First Submission See Block 16	14. Distribution
				b. Copies

16. Remarks	CENWP- HDC- P		Z	0
Within 15 days after completion of tests.				

1. Data Item No.	2. Title of Data Item	3. Subtitle
B023	Reserved	

7. DD 250 Required	9. Dist. Statement Required	10. Frequency	12. Date of First Submission	14. Distribution					
8. ADR Code		11. As of Date	13. Date of Subsequent	<table border="1"> <tr> <td rowspan="2">a. Addressee</td> <td colspan="2">b. Copies</td> </tr> <tr> <td>Draft</td> <td>Final</td> </tr> </table>	a. Addressee	b. Copies		Draft	Final
a. Addressee	b. Copies								
	Draft	Final							

10. REMARKS				

1. Data Item No.	2. Title of Data Item	3. Source
B024	Descriptive Specifications	SD-01 Data
4. Authority (Data Acquisition Document No.)	5. Contract Reference	6. Requiring Office

7. ED 203 NE	6. Dist. Statement Required	10. Frequency	9. Date of Next Submission	11. 30 DAC	12. Distribution
8. APP Code		11. As of Date	13. Date of Subsequent	a. Addressee	b. Copies
					Draft Final

DD FORM 1423 Oct 96 Electronic Edition (CENWP-HDC) J2-6

CONTRACT DATA REQUIREMENTS LIST**FORM APPROVED**
OMB No. 0704-0188

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A. Contract Line Item No.				B. Exhibit B		C. Category: Contract Data TPD _____ TM _____ OTHER _____			
D. System/Item MAIN UNIT CIRCUIT BREAKER REPLACEMENT				E. Contract/PR No.		F: Contractor			
1. Data Item No. B025		2. Title of Data Item 15.5 kV Circuit Breaker and Switchgear Cubicle Modifications				3. Subtitle SD- 04 Drawings			
4. Authority (Data Acquisition Document No.)				5. Contract Reference SECTION 16353, para 1.3, a-e				6. Requiring Office CENWP- HDC- P	
7. DD 250 REC	9. Dist. Statement Required	10. Frequency	12. Date of First Submission 30 DAC	14. Distribution					
8. APP Code A		11. As of Date	13. Date of Subsequent Submission	a. Addressee CENWP- HDC- P	Draft	b. Copies			
						Final			
16. Remarks						Reg	Repro		
				15. Total ----->	3	0			
1. Data Item No. B026		2. Title of Data Item Existing Circuit Breaker Removal Procedure				3. Subtitle SD- 06 Instructions			
4. Authority (Data Acquisition Document No.)				5. Contract Reference SECTION 16353, para 1.3				6. Requiring Office CENWP- HDC- P	
7. DD 250 REC	9. Dist. Statement Required	10. Frequency	12. Date of First Submission 30 DAC	14. Distribution					
8. APP Code A		11. As of Date	13. Date of Subsequent Submission	a. Addressee CENWP- HDC- P	Draft	b. Copies			
						Final			
16. Remarks						Reg	Repro		
				15. Total ----->	3	0			
1. Data Item No. B027		2. Title of Data Item New Circuit Breaker Retrofit Installation Instructions				3. Subtitle SD- 06 Instructions			
4. Authority (Data Acquisition Document No.)				5. Contract Reference SECTION 16353, para 1.3				6. Requiring Office CENWP- HDC- P	
7. DD 250 REC	9. Dist. Statement Required	10. Frequency	12. Date of First Submission 30 DAC	14. Distribution					
8. APP Code A		11. As of Date	13. Date of Subsequent Submission	a. Addressee CENWP- HDC- P	Draft	b. Copies			
						Final			
16. REMARKS						Reg	Repro		
				15. Total ----->	3	0			
1. Data Item No. B028		2. Title of Data Item 15.5 kV Circuit Breaker Operation and Maintenance Manuals				3. Subtitle SD- 06 Instructions			
4. Authority (Data Acquisition Document No.)				5. Contract Reference SECTION 16353, para 1.3				6. Requiring Office CENWP- HDC- P	
7. DD 250 REC	9. Dist. Statement Required	10. Frequency	12. Date of First Submission 30 DAC	14. Distribution					
8. APP Code A		11. As of Date	13. Date of Subsequent Submission	a. Addressee CENWP- HDC- P	Draft	b. Copies			
						Final			
16. Remarks						Reg	Repro		
				15. Total ----->	3	0			
G. Prepared By				H. Date		I. Approve By		J. Date	

CONTRACT DATA REQUIREMENTS LIST**FORM APPROVED**
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 440 hours per response including the time for reviewing instructions, searching existing data gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 1.

A. Contract Line Item No.				B. Exhibit B		C. Category: Contract Data TPD _____ TM _____ OTHER _____			
D. System/Item MAIN UNIT CIRCUIT BREAKER REPLACEMENT				E. Contract/PR No.		F: Contractor			
1. Data Item No. B029		2. Title of Data Item Accessories and Spare Parts Lists				3. Subtitle SD-07 Schedule			
4. Authority (Data Acquisition Document No.)				5. Contract Reference SECTION 16353, para 1.3				6. Requiring Office CENWP- HDC- P	
7. DD 250 REC	9. Dist. Statement Required	10. Frequency	12. Date of First Submission 30 DAC	14. Distribution					
8. APP Code A		11. As of Date	13. Date of Subsequent Submission	a. Addressee CENWP- HDC- P	Draft	b. Copies			
						Final			
						Reg	Repro		
16. Remarks						3	0		
				15. Total ----->		3	0		
1. Data Item No. B030		2. Title of Data Item Circuit Breaker Tests				3. Subtitle SD-09 Reports			
4. Authority (Data Acquisition Document No.)				5. Contract Reference SECTION 16353, para 1.3. a				6. Requiring Office CENWP- HDC- P	
7. DD 250 REC	9. Dist. Statement Required	10. Frequency	12. Date of First Submission 30 DAC	14. Distribution					
8. APP Code A		11. As of Date	13. Date of Subsequent Submission	a. Addressee CENWP- HDC- P	Draft	b. Copies			
						Final			
						Reg	Repro		
16. Remarks						3	0		
				15. Total ----->		3	0		
1. Data Item No. B031		2. Title of Data Item SF6 Gas Tests				3. Subtitle SD-09 Reports			
4. Authority (Data Acquisition Document No.)				5. Contract Reference SECTION 16353, para 1.3. b				6. Requiring Office CENWP- HDC- P	
7. DD 250 REC	9. Dist. Statement Required	10. Frequency	12. Date of First Submission 30 DAC	14. Distribution					
8. APP Code A		11. As of Date	13. Date of Subsequent Submission	a. Addressee CENWP- HDC- P	Draft	b. Copies			
						Final			
						Reg	Repro		
16. REMARKS 7 days in advance.						3	0		
				15. Total ----->		3	0		
1. Data Item No. B032		2. Title of Data Item Reserved				3. Subtitle			
4. Authority (Data Acquisition Document No.)				5. Contract Reference				6. Requiring Office	
7. DD 250 REC	9. Dist. Statement Required	10. Frequency	12. Date of First Submission	14. Distribution					
8. APP Code		11. As of Date	13. Date of Subsequent Submission	a. Addressee	Draft	b. Copies			
						Final			
						Reg	Repro		
16. Remarks									
				15. Total ----->					
G. Prepared By				H. Date		I. Approve By		J. Date	

CONTRACT DATA REQUIREMENTS LIST**FORM APPROVED**
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 440 hours per response including the time for reviewing instructions, searching existing data gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 6.

A. Contract Line Item No.				B. Exhibit B		C. Category: Contract Data TPD _____ TM _____ OTHER _____			
D. System/Item MAIN UNIT CIRCUIT BREAKER REPLACEMENT				E. Contract/PR No.		F: Contractor			
1. Data Item No. B033		2. Title of Data Item Shipping Notice				3. Subtitle			
4. Authority (Data Acquisition Document No.)				5. Contract Reference SECTION D, D-2.5				6. Requiring Office CENWP-HDC-P	
7. DD 250 REC	9. Dist. Statement Required	10. Frequency ASREQ	12. Date of First Submission See Block 16	14. Distribution					
8. APP Code		11. As of Date	13. Date of Subsequent Submission	a. Addressee	Draft		b. Copies		
16. Remarks As soon as each shipment is made.				CENWP-HDC-P		Final			
						Reg	Repro		
						15. Total ----->			
						2	0		
1. Data Item No. B034		2. Title of Data Item Reserved				3. Subtitle			
4. Authority (Data Acquisition Document No.)				5. Contract Reference				6. Requiring Office	
7. DD 250 REC	9. Dist. Statement Required	10. Frequency	12. Date of First Submission	14. Distribution					
8. APP Code		11. As of Date	13. Date of Subsequent Submission	a. Addressee	Draft		b. Copies		
16. Remarks						Final			
						Reg	Repro		
						15. Total ----->			
1. Data Item No. B035		2. Title of Data Item Quality Control Plan				3. Subtitle SD-06 Instructions			
4. Authority (Data Acquisition Document No.)				5. Contract Reference SECTION E, para 1.3. a-g				6. Requiring Office CENWP-HDC-P	
7. DD 250 REC	9. Dist. Statement Required	10. Frequency	12. Date of First Submission 30 DAC	14. Distribution					
8. APP Code A		11. As of Date	13. Date of Subsequent Submission	a. Addressee	Draft		b. Copies		
16. REMARKS Government acceptance required before work is permitted.				CENWP-HDC-P		Final			
						Reg	Repro		
						15. Total ----->			
						3	0		
1. Data Item No. B036		2. Title of Data Item Reserved				3. Subtitle			
4. Authority (Data Acquisition Document No.)				5. Contract Reference				6. Requiring Office	
7. DD 250 REC	9. Dist. Statement Required	10. Frequency	12. Date of First Submission	14. Distribution					
8. APP Code		11. As of Date	13. Date of Subsequent Submission	a. Addressee	Draft		b. Copies		
16. Remarks						Final			
						Reg	Repro		
						15. Total ----->			
						3			
G. Prepared By				H. Date		I. Approve By			

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Attachment J3

INSTRUCTIONS FOR COMPLETING DD FORM 1423

ADDRESS AND CODES

1. Where the following office symbol is shown in Block 14 the material shall be addressed as follows:

Symbol	Address
CENWP-HDC-P	Department of the Army Portland District, U.S. Army Corps of Engineers ATTN: CENWP-HDC-P P.O. Box 2946 Portland, OR 97208-2946

2. The codes used are defined as follows:

<u>Code</u>	<u>Block</u>	<u>Definition</u>
(1) OTIME	10	One time.
(2) XX	7	Inspection and acceptance requirements specified elsewhere in contract.
(3) A	8	Requires specific approval.
(4) ONE/R	10	One time plus revisions.
(5) DAC	12	Days after receipt of contract.
(6) DAR	13	Days after receipt of drawings APPROVED AS NOTED or RETURNED FOR CORRECTION.
(7) DBD	13	Days before delivery.
(8) ASREQ	10,11,12	As required.
(9) MTHLY	10	Monthly.
(10) O	11	Submit on last day of the month.

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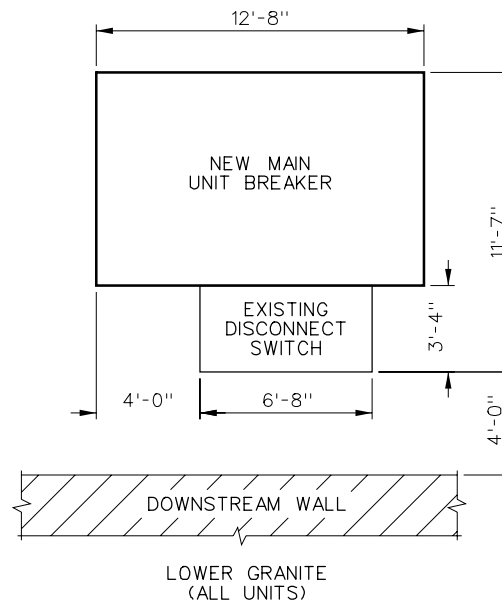
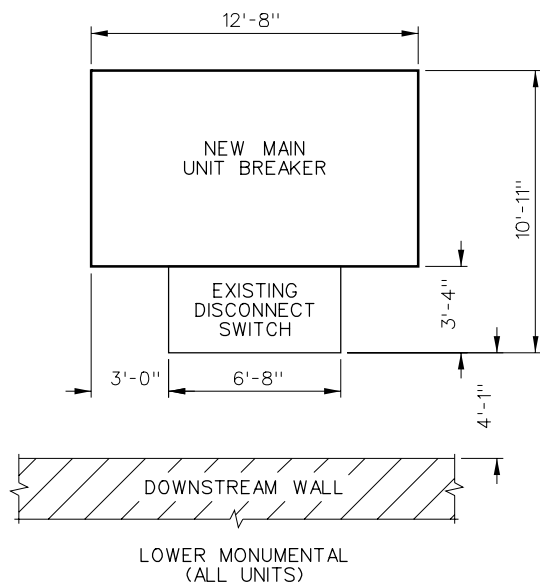
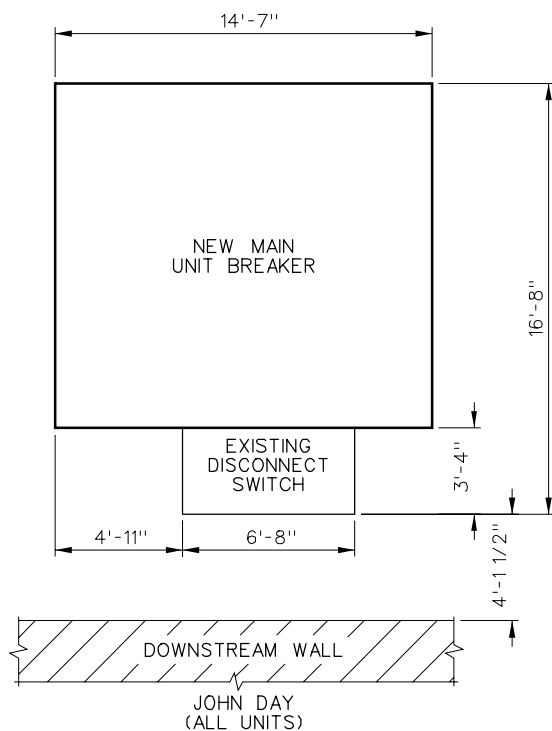
Attachment J4

DETAIL DRAWINGS (BOUND IN THE SPECIFICATIONS)

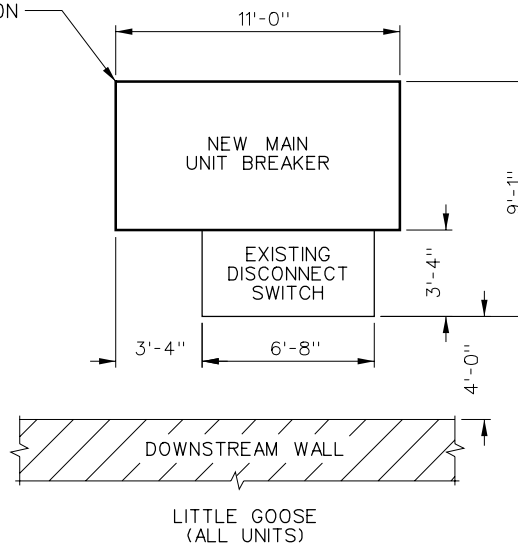
<u>DRAWING NUMBER</u>	<u>SHEET NUMBER</u>	<u>TITLE</u>	<u>DATE</u>
<u>MAIN UNIT BREAKER FOOTPRINTS, VARIOUS LOCATIONS</u>			
<u>NWP-5.1-0-0/13</u>	<u>1</u>	<u>John Day, Lower Granite, Little Goose & Lower Monumental</u>	
<u>NWP-5.1-0-0/14</u>	<u>2</u>	<u>The Dalles (Units 1-22) & Chief Joseph (Unit 17)</u>	
<u>NWP-5.1-0-0/15</u>	<u>3</u>	<u>Bonneville, Dworshak, & Chief Joseph (Units 18-27)</u>	
<u>NWP-5.1-0-0/16</u>	<u>4</u>	<u>McNary & Libby</u>	

The listed drawings are attached hereinafter and made a part of this attachment.

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BOLD LINE INDICATES
TYPICAL WORKING AREA
FOR MAIN UNIT BREAKER
INSTALLATION

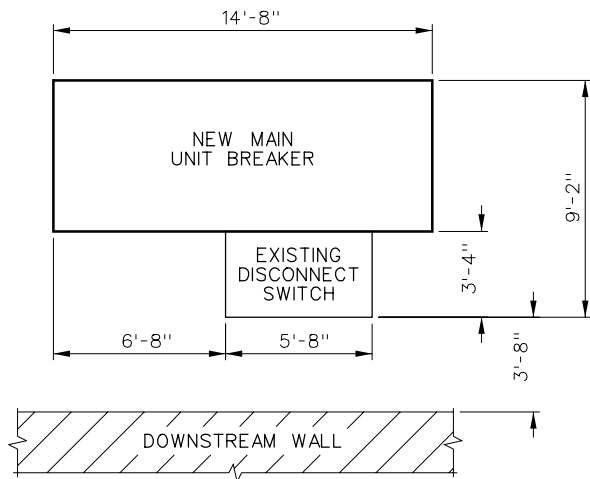
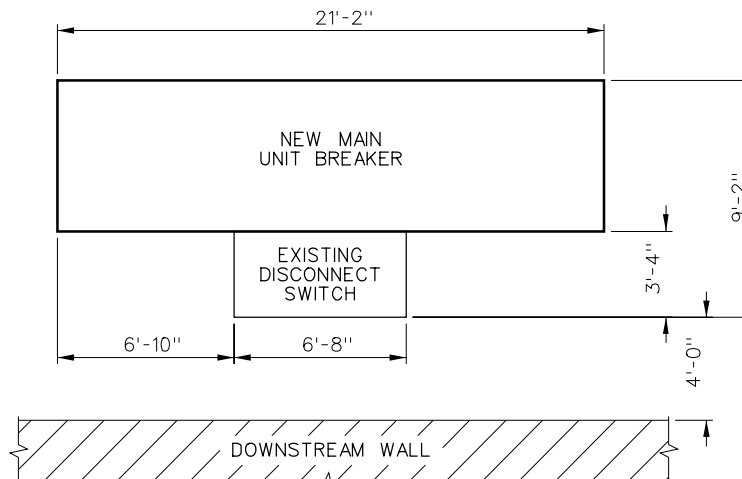


NOTES:

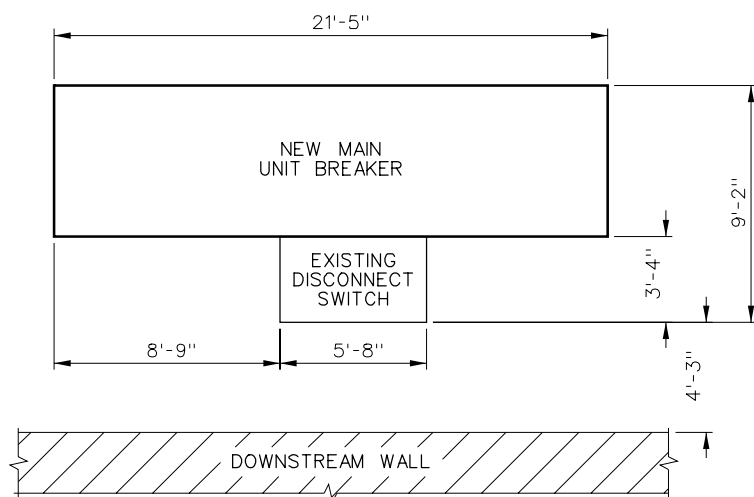
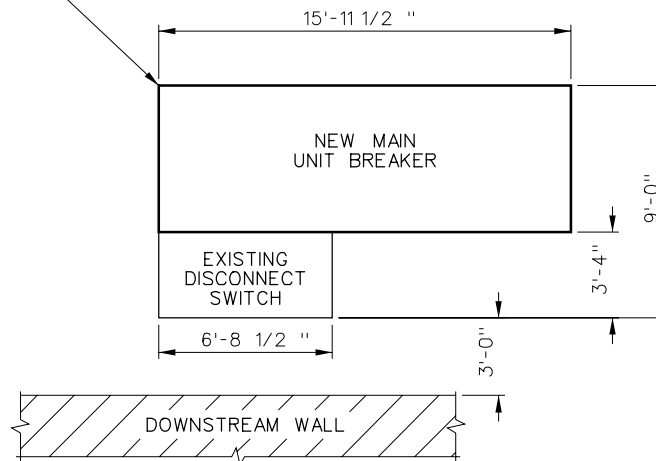
1. THE NEW MAIN UNIT BREAKER SHALL NOT EXTEND BEYOND THE MAIN UNIT BREAKER OUTLINE SHOWN ON THESE SKETCHES.
2. THE EXISTING DISCONNECT SWITCH CUBICLES ARE SHOWN. REFERENCE SPECIFICATION SECTION 16353, PARAGRAPH 2.2.1.

DESIGNED BY J. MAHAR	U.S. ARMY ENGINEER DISTRICT PORTLAND, OREGON
DRAWN BY E. HOLZAPFEL	MAIN UNIT BREAKER FOOTPRINTS - SHEET 1
CHECKED BY J. MAHAR	
PREPARED BY J. MAHAR	
CONTRACT NUMBER	
SUBMITTED BY BRENT L. MAHAN SPECTOR, HYDROELECTRIC DESIGN CENTER	
SCALE AS SHOWN SHEET NO. 13 NWP-5.1-0-0/13	

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THE DALLES
(UNITS 1-8)THE DALLES
(UNITS 15-22)

BOLD LINE INDICATES
TYPICAL WORKING AREA
FOR MAIN UNIT BREAKER
INSTALLATION

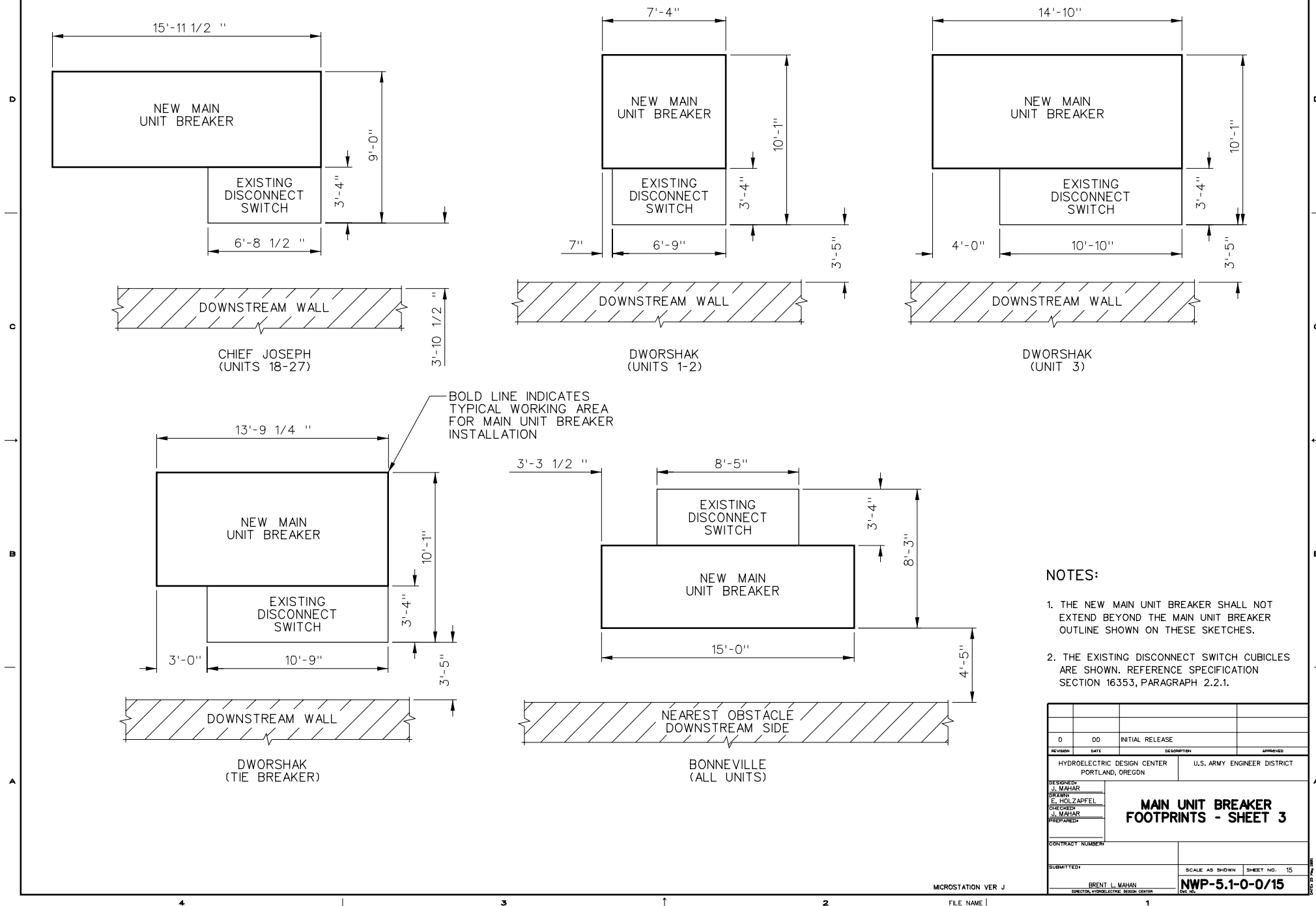
THE DALLES
(UNITS 9-14)CHIEF JOSEPH
(UNIT 17)

NOTES:

1. THE NEW MAIN UNIT BREAKER SHALL NOT EXTEND BEYOND THE MAIN UNIT BREAKER OUTLINE SHOWN ON THESE SKETCHES.
2. THE EXISTING DISCONNECT SWITCH CUBICLES ARE SHOWN. REFERENCE SPECIFICATION SECTION 16353, PARAGRAPH 2.2.1.

DESIGNED	J. MAHAR	U.S. ARMY ENGINEER DISTRICT
DRAWN	E. HOLZAPFEL	PORTLAND, OREGON
CHECKED	J. MAHAR	
PREPARED		
CONTRACT NUMBER		
SUBMITTED		SCALE AS SHOWN SHEET NO. 14
BRENT L. MAHAN SPECTOR, HYDROELECTRIC DESIGN CENTER		NWP-5.1-0-0/14

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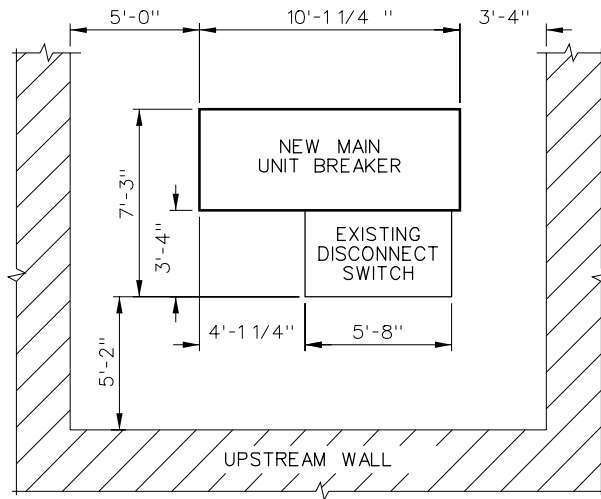


NOTES:

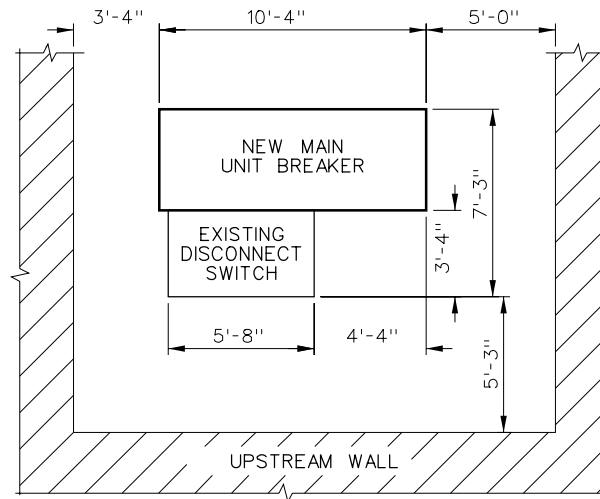
1. THE NEW MAIN UNIT BREAKER SHALL NOT EXTEND BEYOND THE MAIN UNIT BREAKER OUTLINE SHOWN ON THESE SKETCHES.
2. THE EXISTING DISCONNECT SWITCH CUBICLES ARE SHOWN. REFERENCE SPECIFICATION SECTION 16353, PARAGRAPH 2.2.1.

DESIGNED	J. MAHAR	U.S. ARMY ENGINEER DISTRICT
DRAWN	E. HOLZAPFEL	PORTLAND, OREGON
CHECKED	J. MAHAR	
PREPARED		
CONTRACT NUMBER		
SUBMITTED		SCALE AS SHOWN SHEET NO. 15
BRENT L. MAHAN SPECTOR, HYDROELECTRIC DESIGN CENTER		NWP-5.1-0-0/15

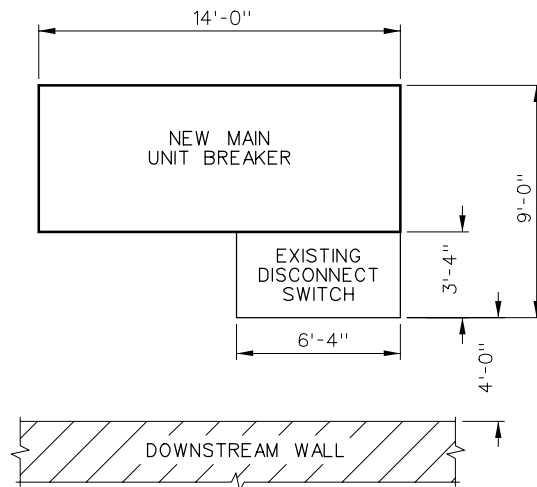
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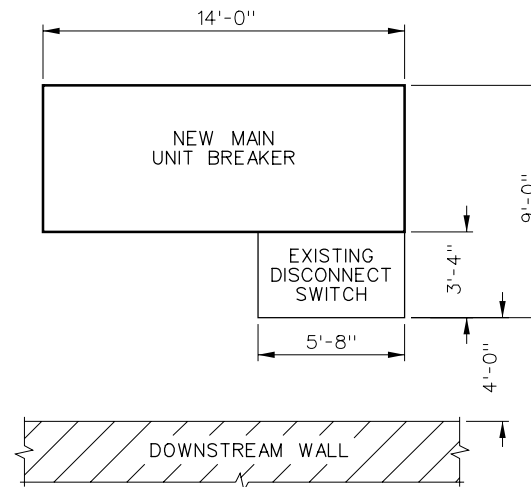
LIBBY
(UNIT 2 & 4)



LIBBY
(UNITS 1 & 3)



M McNary
(UNITS 1-8)



M McNary
(UNITS 9-14)

NOTES:

1. THE NEW MAIN UNIT BREAKER SHALL NOT EXTEND BEYOND THE MAIN UNIT BREAKER OUTLINE SHOWN ON THESE SKETCHES.
2. THE EXISTING DISCONNECT SWITCH CUBICLES ARE SHOWN. REFERENCE SPECIFICATION SECTION 16353, PARAGRAPH 2.2.1.

DESIGNED BY	J. MAHAR	U.S. ARMY ENGINEER DISTRICT
DRAWN BY	E. HOLZAPFEL	PORTLAND, OREGON
CHECKED BY	J. MAHAR	
PREPARED BY		
CONTRACT NUMBER		
SUBMITTED BY		SCALE AS SHOWN SHEET NO. 16
BRENT L. MAHAN		NWP-5.1-0-0/16
SUPERVISOR, HYDROELECTRIC DESIGN CENTER		

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General Decision Number WA010001

General Decision Number **WA010001**

Superseded General Decision No. WA000001

State: Washington

Construction Type:

DREDGING

HEAVY

HIGHWAY

County(ies):

STATEWIDE

HEAVY AND HIGHWAY AND DREDGING CONSTRUCTION PROJECTS

(Excludes D.O.E. Hanford Site in Benton and Franklin Counties)

Modification Number Publication Date

0	03/02/2001
1	03/09/2001
2	03/16/2001
3	03/30/2001
4	04/06/2001
5	05/11/2001
6	06/01/2001
7	06/08/2001
8	06/15/2001
9	06/22/2001
10	06/29/2001
11	07/06/2001
12	07/13/2001
13	08/03/2001
14	08/31/2001
15	09/28/2001
16	10/19/2001
17	11/02/2001
18	11/16/2001
19	12/14/2001
20	12/28/2001
21	01/04/2002

COUNTY(ies):

STATEWIDE

CARP0001W 06/01/2001

Rates

Fringes

COLUMBIA RIVER AREA - ADAMS, BENTON, COLUMBIA, DOUGLAS (EAST OF THE 120TH MERIDIAN), FERRY, FRANKLIN, GRANT, OKANOGAN (EAST OF THE 120TH MERIDIAN) AND WALLA WALLA COUNTIES

CARPENTERS:

GROUP 1:	23.18	6.00
GROUP 2:	24.29	6.00
GROUP 3:	23.45	6.00
GROUP 4:	23.18	6.00
GROUP 5:	57.45	6.00
GROUP 6:	25.56	6.00

SPOKANE AREA: ASOTIN, GARFIELD, LINCOLN, PEND OREILLE, SPOKANE, STEVENS AND WHITMAN COUNTIES

CARPENTERS:

GROUP 1:	22.51	6.00
GROUP 2:	23.61	6.00
GROUP 3:	22.77	6.00

GROUP 4:	22.51	6.00
GROUP 5:	55.78	6.00
GROUP 6:	24.82	6.00

CARPENTERS CLASSIFICATIONS

GROUP 1: Carpenter; Burner-Welder; Rigger and Signaler; Insulators (all types), Acoustical, Drywall and Metal Studs, Metal Panels and Partitions; Floor Layer, Sander, Finisher and Astro Turf; Layout Carpenters; Form Builder; Rough Framers; Outside or Inside Finisher, including doors, windows, and jams; Sawfiler; Shingler (wood, composition) Solar, Fiberglass, Aluminum or Metal; Scaffold Erecting and Dismantling; Stationary Saw-Off Bearer; Wire, Wood and Metal Lather Applicator

GROUP 2: Millwright, machine erector

GROUP 3: Piledriver - includes driving, pulling, cutting, placing collars, setting, welding, or creosote treated material, on all piling

GROUP 4: Bridge, dock and wharf carpenters

GROUP 5: Divers

GROUP 6: Divers Tender

DEPTH PAYY FOR DIVERS:

Each foot over 50-100 feet	\$1.00
Each foot over 100-175 feet	2.25
Each foot over 175-250 feet	5.50

HAZMAT PROJECTS

Anyone working on a HAZMAT job (task), where HAZMAT certification is required, shall be compensated at a premium, in addition to the classification working in as follows:

LEVEL D + \$.25 per hour - This is the lowest level of protection.

No respirator is used and skin protection is minimal.

LEVEL C + \$.50 per hour - This level uses an air purifying respirator or additional protective clothing.

LEVEL B + \$.75 per hour - Uses same respirator protection as Level A. Supplied air line is provided in conjunction with a chemical "splash suit".

LEVEL A +\$1.00 per hour - This level utilizes a fully encapsulated suit with a self-contained breathing apparatus or a supplied air line.

CARP00030 12/01/2001

	Rates	Fringes
SOUTHWEST WASHINGTON: CLARK, COWLITZ, KLUCKITAT, LEWIS(Piledriver only), PACIFIC (South of a straight line made by extending the north boundary line of Wahkiakum County west to Willapa Bay to the Pacific Ocean), SKAMANIA AND WAHAKIACUM COUNTIES and INCLUDES THE ENTIRE PENINSULA WEST OF WILLAPA BAY SEE ZONE DESCRIPTION FOR CITIES BASE POINTS		

ZONE 1:

CARPENTERS; ACOUSTICAL	26.83	8.29
DRYWALL	26.83	8.29

FLOOR LAYERS & FLOOR FINISHERS

(the laying of all hardwood floors nailed and mastic set, parquet and wood-type tiles, and block floors, the sanding and finishing of floors, the preparation of old and new floors when the materials mentioned above are to be installed); INSULATORS

(fiberglass and similar irritating materials	26.98	8.29
MILLWRIGHTS	27.33	8.29
PILEDRIVERS	27.33	8.29
DIVERS	63.75	8.29
DIVERS TENDERS	29.33	8.29

DEPTH PAY

50 TO 100 FEET	\$1.00 PER FOOT OVER 50 FEET
100 TO 150 FEET	1.50 PER FOOT OVER 100 FEET
150 TO 200 FEET	2.00 PER FOOT OVER 150 FEET

Zone Differential (Add up Zone 1 rates):

Zone 2 - \$0.85

Zone 3 - 1.25

Zone 4 - 1.70

Zone 5 - 2.00

Zone 6 - 3.00

BASEPOINTS: ASTORIA, LONGVIEW, PORTLAND, THE DALLES, AND VANCOUVER, (NOTE: All dispatches for Washington State Counties: Cowlitz, Wahkiakum and Pacific shall be from Longview Local #1707 and mileage shall be computed from that point.)

ZONE 1: Projects located within 30 miles of the respective city hall of the above mentioned cities

ZONE 2: Projects located more than 30 miles and less than 40 miles of the respective city of the above mentioned cities

ZONE 3: Projects located more than 40 miles and less than 50 miles of the respective city of the above mentioned cities

ZONE 4: Projects located more than 50 miles and less than 60 miles of the respective city of the above mentioned cities.

ZONE 5: Projects located more than 60 miles and less than 70 miles of the respective city of the above mentioned cities

ZONE 6: Projects located more than 70 miles of the respected city of the above mentioned cities

CARP0770D 12/01/2001

	Rates	Fringes
WESTERN WASHINGTON: CLALLAM, GRAYS HARBOR, ISLAND, JEFFERSON, KING, KITSAP, LEWIS (excludes piledrivers only), MASON, PACIFIC (North of a straight line made by extending the north boundary line of Wahkiakum County west to the Pacific Ocean), PIERCE, SAN JUAN, SKAGIT, SNOHOMISH, THURSTON AND WHATCOM COUNTIES		

CARPENTERS AND DRYWALL APPLICATORS	27.54	7.61
------------------------------------	-------	------

CARPENTERS ON CREOSOTE MATERIAL	27.82	7.61
---------------------------------	-------	------

SAWFILERS, STATIONARY POWER SAW OPERATORS, FLOOR FINISHER, FLOOR LAYER, SHINGLER, FLOOR SANDER OPERATOR AND OPERATORS OF OTHER STATIONARY WOOD WORKING TOOLS

STATIONARY WOOD WORKING TOOLS	27.67	7.61
-------------------------------	-------	------

MILLWRIGHT AND MACHINE ERECTORS	28.54	7.61
---------------------------------	-------	------

ACOUSTICAL WOKRERS	27.70	7.61
--------------------	-------	------

PILEDRIVER, DRIVING, PULLING, CUTTING, PLACING COLLARS, SETTING, WELDING OR CRESOTE

TREATED MATERIAL, ALL PILING	27.74	7.61
PILEDRIIVER, BRIDGE, DOCK & WHARF CARPENTERS	27.54	7.61
DIVERS	67.96	7.61
DIVERS TENDER	30.24	7.61

(HOURLY ZONE PAY APPLICABLE TO ALL CLASSIFICATIONS EXCEPT
MILLWRIGHT AND PILEDRIIVER)

Hourly Zone Pay shall be paid on jobs located outside
of the free zone computed from the city center of the
following listed cities:

Seattle	Olympia	Bellingham
Auburn	Bremerton	Anacortes
Renton	Shelton	Yakima
Aberdeen-Hoquiam	Tacoma	Wenatchee
Ellensburg	Everett	Port Angeles
Centralia	Mount Vernon	Sunnyside
Chelan	Pt. Townsend	

Zone Pay

0 -25 radius miles	Free
25-35 radius miles	\$1.00/hour
35-45 radius miles	\$1.15/hour
45-55 radius miles	\$1.35/hour
Over 55 radius miles	\$1.55/hour

(HOURLY ZONE PAY - MILLWRIGHT AND PILEDRIIVER ONLY)

Hourly Zone Pay shall be computed from Seattle Union
Hall, Tacoma City center, and Everett City center

Zone Pay

0 -25 radius miles	Free
25-45 radius miles	\$.70/hour
Over 45 radius miles	\$1.50/hour

CENTRAL WASHINGTON: CHELAN, DOUGLAS (WEST OF THE 120TH MERIDIAN),
KITITITAS, OKANOGAN (WEST OF THE 120TH MERIDIAN) AND YAKIMA
COUNTIES

CARPENTERS AND DRYWALL APPLICATORS	20.72	7.47
CARPENTERS ON CREOSOTED MATERIAL	20.82	7.47
SAWFILERS, STATIONARY POWER S37 OPERATORS, FLOOR FINISHER, FLOOR LAYER, SHINGLERS, FLOOR SANDER OPERATORS	20.85	7.47
MILLWRIGHT AND MACHINE ERECTORS	28.22	7.47
PILEDRIIVER, DRIVING, PULLING, CUTTING, PLACING COLLARS, SETTING, WELDING OR CRESOTE TREATED MATERIAL, ALL PILING	27.42	7.47
PILEDRIIVER, BRIDGE DOCK AND WHARF CARPENTERS	27.22	7.47
DIVERS	65.81	6.62
DIVERS TENDER	29.28	6.62

(HOURLY ZONE PAY APPLICABLE TO ALL CLASSIFICATIONS EXCEPT
MILLWRIGHT AND PILEDRIIVER)

Hourly Zone Pay shall be paid on jobs located outside
of the free zone computed from the city center of the
following listed cities:

Seattle	Olympia	Bellingham
Auburn	Bremerton	Anacortes
Renton	Shelton	Yakima
Aberdeen-Hoquiam	Tacoma	Wenatchee

Ellensburg	Everett	Port Angeles
Centralia	Mount Vernon	Sunnyside
Chelan	Pt. Townsend	
Zone Pay		
0 -25 radius miles	Free	
25-35 radius miles	\$1.00/hour	
35-45 radius miles	\$1.15/hour	
45-55 radius miles	\$1.35/hour	
Over 55 radius miles	\$1.55/hour	
(HOURLY ZONE PAY - MILLWRIGHT AND PILEDRIVER ONLY)		
Hourly Zone Pay shall be computed from Seattle Union Hall, Tacoma City center, and Everett City center		
Zone Pay		
0 -25 radius miles	Free	
25-45 radius miles	\$.70/hour	
Over 45 radius miles	\$1.50/hour	

ELEC0046A	06/04/2001	
	Rates	Fringes
CALLAM, JEFFERSON, KING AND KITSAP COUNTIES		
ELECTRICIANS	31.50	3%+8.88
CABLE SPLICERS	34.65	3%+8.88

ELEC0048C	07/01/2001	
	Rates	Fringes
CLARK, KLINKITAT AND SKAMANIA COUNTIES		
ELECTRICIANS	30.20	3%+10.25
CABLE SPLICERS	30.45	3%+10.25

ELEC0073A	07/01/2001	
	Rates	Fringes
ADAMS, FERRY, LINCOLN, PEND OREILLE, SPOKANE, STEVENS, WHITMAN COUNTIES		
ELECTRICIANS	23.67	3%+9.13
CABLE SPLICERS	24.07	3%+9.13

ELEC0076B	07/01/2001	
	Rates	Fringes
GRAYS HARBOR, LEWIS, MASON, PACIFIC, PIERCE, AND THURSTON COUNTIES		
ELECTRICIANS	28.29	3%+10.32
CABLE SPLICERS	31.12	3%+10.32

ELEC0077C	02/01/2001	
	Rates	Fringes
LINE CONSTRUCTION:		
CABLE SPLICERS	33.89	3.875%+6.95
LINEMEN, POLE SPRAYERS, HEAVY LINE EQUIPMENT MAN	30.58	3.875%+6.95
LINE EQUIPMENT MEN	26.72	3.875%+5.20
POWDERMEN, JACKHAMMERMEN	23.69	3.875%+5.20
GROUND MEN	22.31	3.875%+5.20
TREE TRIMMER	21.39	3.875%+5.20

ELEC0112E	12/01/2000	
	Rates	Fringes
ASOTIN, BENTON, COLUMBIA, FRANKLIN, GARFIELD, KITTITAS,		

WALLA WALLA, YAKIMA COUNTIES

ELECTRICIANS	27.75	3%+6.93
CABLE SPLICERS	29.14	3%+6.93

ELEC0191C 08/31/2001

	Rates	Fringes
ISLAND, SAN JUAN, SNOHOMISH, SKAGIT AND WHATCOM COUNTIES		
ELECTRICIANS	29.66	3%+8.33
CABLE SPLICERS	33.23	3%+8.33

ELEC0191D 08/31/2001

	Rates	Fringes
CHELAN, DOUGLAS, GRANT AND OKANOGAN COUNTIES		
ELECTRICIANS	26.66	3%+8.03
CABLE SPLICERS	29.33	3%+8.03

* ELEC0970A 01/01/2002

	Rates	Fringes
COWLITZ AND WAHKIAKUM COUNTIES		
ELECTRICIANS	27.55	3%+8.75
CABLE SPLICERS	30.31	3%+8.75

ENGI0302E 06/01/2001

	Rates	Fringes
CHELAN (WEST OF THE 120TH MERIDIAN), CLALLAM, DOUGLAS (WEST OF THE 120TH MERIDIAN), GRAYS HARBOR, ISLAND, JEFFERSON, KING, KITSAP, KITTITAS, MASON, OKANOGAN (WEST OF THE 120TH MERIDIAN), SAN JUAN, SKAGIT, SNOHOMISH, WHATCOM AND YAKIMA (WEST OF THE 120TH MERIDIAN) COUNTIES		
PROJECTS		

CATEGORY A PROJECTS (excludes Category B projects, as show below)

POWER EQUIPMENT OPERATORS:

Zone 1 (0-25 radius miles):

GROUP 1AAA	29.61	8.38
GROUP 1AA	29.11	8.38
GROUP 1A	28.61	8.38
GROUP 1	28.11	8.38
GROUP 2	27.67	8.38
GROUP 3	27.31	8.38
GROUP 4	25.21	8.38

Zone 2 (26-45 radius miles) - Add \$.70 to Zone 1 rates

Zone 3 (Over 45 radius miles) - Add \$1.00 to Zone 1 rates

BASEPOINTS: Bellingham, Mount Vernon, Kent, Port Angeles, Port Townsend, Aberdeen, Shelton, Bremerton, Wenatchee, Yakima, Seattle, Everett

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1AAA - Cranes-over 300 tons or 300 ft. of boom (including job with attachments)

GROUP 1AA - Cranes - 200 tons to 300 tons or 250 ft. of boom (including jib and attachments); Tower crane over 175 ft. in height, base to boom

GROUP 1A - Cranes - 100 tons thru 199 tons or 150' of boom (including jib with attachments); Crane-overhead, bridge type, 100 tons and over; Tower crane up to 175 ft. in height base to boom; Loader-overhead, 8 yards and over; Shovel, excavator, backhoes-6 yards and over with attachments

GROUP 1 - Cableway; Cranes-45 tons thru 99 tons, under 150 ft. of boom (including jib with attachments); Crane-overhead, bridge type, 45 tons thru 99 tons; Shovel, excavator, backhoes over 3 yards and under 6 yards; Hard tail end dump articulating off-road equipment 45 yards and over; Loader-overhead, 6 yards to, but not including 8 yards; Mucking machine, mole, tunnel, drill and/or shield; Quad 9, HD 41, d-10; Remote control operator on rubber tired earth moving equipment; Rollagon; Scrapers-self-propelled-45 yards and over; Slipform pavers; Transporters, all track or truck type

GROUP 2 - Barrier machine (zipper); Barch Plant operator-concrete; Bump cutter; Cranes-20 tons thru 44 tons with attachments; Cranes-overheads, bridge type-20 tons through 44 tons; Chipper; Concrete pump-truck mount with boom attachment; Crusher; Deck Engineer/Deck Winches (power); Drilling machine; Excavator, shovel backhoe-3 yards and under; Finishing machine Bidwell, Gamaco and similar equipment; Guardrail punch; Horizontal/directional drill operator; Loaders, overhead under 6 yds.; Loaders-plant feed; Locomotives-all; Mechanics-all; Mixers-asphalt plant; Motor patrol graders-finishing; Pildriver (other than crane mount); Roto-mill, roto-grinder; Screedman, Spreader, Topside Operator-Blaw Knox, Cedar Rapids, Jaeger, Caterpillar, Barbar Green; Scraper-self-propelled, hard tail end dump, articulating off-road equipment-under 45 yards; Subgrader trimmer; Tractors, backhoes-over 75 hp; Transfer material service machine-shuttle buggy, blow knox, roadtec; Truck crane oiler/driver-100 tons and over; Truck mount portable conveyor;Yo Yo Pay Dozer

GROUP 3 - Conveyors; Cranes-thru 19 tons with attachments; Cranes-A-frame over 10 tons; Drill oilers-auger type, truck or crane mount; Dozers D9 and under; Forklifts-3000 lbs and over with attachments; horizontal/directional drill locator; Outside hoists-(elevators and manlifts), air tuggers, strao tower bucket elevators; Hydralifts/boom truck-over 10 tons; Loader-elevating type belt; Motor Patrol Grader-non-finishing; Plant Oiler-asphalt, crusher; Pumps-concrete; Roller, plant mix or multi-lift materials; Saws-concrete; Scrapers-concrete and carryall; Service engineers-equipment; Trenching machines; Truck crane oiler/driver-under 100 tons Tractors, backhoes-under 75 hp

GROUP 4 - Assistant Engineer; Bobcat; Brooms; Compressor; Concrete Finish Machine-laser screed; Cranes-A-frame-10 tons and under; Elevator and manlift-permanent and shaft type; Forklifts-under 3000 lbs. with attachments; Gradechecker, stakehop; Hydralifts, boom trucks-10 tons and under; Oil distributors, blower distribution and mulch seeding operator; Pavement breaker; Post Hole Digger-mechanical; Power Plant; Pumps-water; Rigger and Bellman; Roller-other than plant mix; Wheel Tractors, farmall type; Shot crete/gunite equipment operator

CATEGORY B PROJECTS - 95% of the basic hourly rate for each group plus full fringe benefits applicable to Category A projects shall apply to the following projects. Reduced rates may be paid on the following:

1. Projects involving work on structures such as buildings and structures whose total value is less than \$1.5 million excluding mechanical, electrical, and utility portions of the contract.

2. Projects of less than \$1 million where no building is involved. Surfacing and paving included, but utilities excluded.
3. Marine projects (docks, wharfs, etc.) less than \$150,000.

WORK PERFORMED ON HYDRAULIC DREDGES:

Total Project Cost \$300,000 and over

GROUP 1	26.85	8.38
GROUP 2	26.95	8.38
GROUP 3	27.29	8.38
GROUP 4	27.34	8.38
GROUP 5	28.73	8.38
GROUP 6	26.85	8.38

GROUP 1: Assistant Mate (Deckhand)

GROUP 2: Oiler

GROUP 3: Assistant Engineer (Electric, Diesel, Steam or Booster Pump); Mates and Boatmen

GROUP 4: Craneman, Engineer Welder

GROUP 5: Leverman, Hydraulic

GROUP 6: Maintenance

Total Project cost under \$300,000

GROUP 1	25.51	8.38
GROUP 2	25.60	8.38
GROUP 3	25.93	8.38
GROUP 4	25.97	8.38
GROUP 5	27.29	8.38
GROUP 6	25.51	8.38

GROUP 1: Assistant Mate (Deckhand)

GROUP 2: Oiler

GROUP 3: Assistant Engineer (Electric, Diesel, Steam, or Booster Pump); Mates and Boatmen

GROUP 4: Craneman, Engineer Welder

GROUP 5: Leverman, Hydraulic

GROUP 6: Maintenance

HEAVY WAGE RATES (CATEGORY A) APPLIES TO CLAM SHELL DREDGE, HOE AND DIPPER, SHOVELS AND SHOVEL ATTACHMENTS, CRANES AND BULLDOZERS.

HANDLING OF HAZARDOUS WASTE MATERIALS: Personnel in all craft classifications subject to working inside a federally designated hazardous perimeter shall be eligible for compensation in accordance with the following group schedule relative to the level of hazardous waste as outlined in the specific hazardous waste project site safety plan.

H-1 Base wage rate when on a hazardous waste site when not outfitted with protective clothing

H-2 Class "C" Suit - Base wage rate plus \$.25 per hour.

H-3 Class "B" Suit - Base wage rate plus \$.50 per hour.

H-4 Class "A" Suit - Base wage rate plus \$.75 per hour.

ENGI0370C 06/01/2001

	Rates	Fringes
ADAMS, ASOTIN, BENTON, CHELAN (EAST OF THE 120TH MERIDIAN), COLUMBIA, DOUGLAS (EAST OF THE 120TH MERIDIAN), FERRY, FRANKLIN, GARFIELD, GRANT, LINCOLN, OKANOGAN (EAST OF THE 120TH MERIDIAN), PEND OREILLE, SPOKANE, STEVENS, WALLA WALLA, WHITMAN AND YAKIMA (EAST OF THE 120TH MERIDIAN) COUNTIES		

ZONE 1:

POWER EQUIPMENT OPERATORS:

GROUP 1A	20.94	6.02
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GROUP 1	21.49	6.02
GROUP 2	21.81	6.02
GROUP 3	22.42	6.02
GROUP 4	22.58	6.02
GROUP 5	22.74	6.02
GROUP 6	23.02	6.02
GROUP 7	23.29	6.02
GROUP 8	24.39	6.02

ZONE DIFFERENTIAL (Add to Zone 1
rate): Zone 2 - \$2.00

Zone 1: Within 45 mile radius of Spokane, Moses Lake, Pasco,
Washington; Lewiston, Idaho

Zone 2: Outside 45 mile radius of Spokane, Moses Lake, Pasco,
Washington; Lewiston, Idaho

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1A: Boat Operator; Crush Feeder; Oiler; Steam Cleaner

GROUP 1: Bit Grinders; Bolt Threading Machine; Compressors
(under 2000 CFM, gas, diesel, or electric power); Deck Hand;
Drillers Helper (Assist driller in making drill rod connections,
service drill engine and air compressor, repair drill rig and
drill tools, drive drill support truck to and on the job site,
remove drill cuttings from around bore hole and inspect drill rig
while in operation); Fireman & Heater Tender; Grade Checker;
Hydro-seeder, Mulcher, Nozzleman; Oiler Driver, & Cable Tender,
Mucking Machine; Pumpman; Rollers, all types on subgrade,
including seal and chip coatings (farm type, Case, John Deere &
similar, or Compacting Vibrator), except when pulled by Dozer
with operable blade; Welding Machine

GROUP 2: A-frame Truck (single drum); Assistant Refrigeration
Plant (under 1000 ton); Assistant Plant Operator, Fireman or
Pugmixer (asphalt); Bagley or Stationary Scraper; Belt Finishing
Machine; Blower Operator (cement); Cement Hog; Compressor (2000
CFM or over, 2 or more, gas diesel or electric power); Concrete
Saw (multiple cut); Distributor Leverman; Ditch Witch or similar;
Elevator Hoisting Materials; Dope Pots (power agitated); Fork
Lift or Lumber Stacker, hydra-lift & similar; Gin Trucks
(pipeline); Hoist, single drum; Loaders (bucket elevators and
conveyors); Longitudinal Float; Mixer (portable-concrete);
Pavement Breaker, Hydra-Hammer & similar; Power Broom; Railroad
Ballast Regulation Operator (self-propelled); Railroad Power
Tamp Operator (self-propelled); Railroad Tamp Jack
Operator (self-propelled); Spray Curing Machine (concrete);
Spreader Box (self-propelled); Straddle Buggy (Ross & similar
on construction job only); Tractor (Farm type R/T with
attachment, except Backhoe); Tugger Operator

GROUP 3: A-frame Truck (2 or more drums); Assistant
Refrigeration Plant & Chiller Operator (over 1000 ton);
Backfillers (Cleveland & similar); Batch Plant & Wet Mix
Operator, single unit (concrete); Belt-Crete Conveyors with
power pack or similar; Belt Loader (Kocal or similar); Bending
Machine; Bob Cat; Boring Machine (earth); Boring Machine (rock
under 8" bit) (Quarry Master, Joy or similar); Bump Cutter
(Wayne, Saginaw or similar); Canal Lining Machine (concrete);
Chipper (without crane); Cleaning & Doping Machine (pipeline);
Deck Engineer; Elevating Belt-type Loader (Euclid, Barber Green &
similar); Elevating Grader-type Loader (Dumora, Adams or similar);
Generator Plant Engineers (diesel or electric); Gunnite

Combination Mixer & Compressor; Locomotive Engineer; Mixermobile; Mucking Machine; Posthole Auger or Punch; Pump (grout or jet); Soil Stabilizer (P & H or similar); Spreader Machine; Tractor (to D-6 or equivalent) and Traxcavator; Traverse Finish Machine; Turnhead Operator

GROUP 4: Concrete Pumps (squeeze-crete, flow-crete, pump-crete, Whitman & similar); Curb Extruder (asphalt or concrete); Drills (churn, core, calyx or diamond)(operate drilling machine, drive or transport drill rig to and on job site and weld well casing); Equipment Serviceman; Greaser & Oiler; Hoist (2 or more drums or Tower Hoist); Loaders (overhead & front-end, under 4 yds. R/T); Refrigeration Plant Engineer (under 1000 ton); Rubber-tired Skidders (R/T with or without attachments); Surface Heater & Plant Machine; Trenching Machines (under 7 ft. depth capacity); Turnhead (with re-screening); Vacuum Drill (reverse circulation drill under 8" bit)

GROUP 5: Backhoe (under 45,000 gw); Backhoe & Hoe Ram (under 3/4 yd.); Carrydeck & Boom Truck (under 25 tons); Cranes (25 tons & under), all attachments including clamshell, dragline; Derricks & Stifflegs (under 65 tons); Drilling Equipment(8" bit & over) (Robbins, reverse circulation & similar)(operates drilling machine, drive or transport drill rig to and on job site and weld well casing); Hoe Ram; Piledriving Engineers; Paving (dual drum); Railroad Track Liner Operatr (self-propelled); Refrigeration Plant Engineer (1000 tons & over); Signalman (Whirleys, Highline Hammerheads or similar)

GROUP 6: Asphalt Plant Operator; Automatic Subgrader (Ditches & Trimmers)(Autograde, ABC, R.A. Hansen & similar on grade wire); Backhoe (45,000 gw and over to 110,000 gw); Backhoes & Hoe Ram (3/4 yd. to 3 yd.); Batch Plant (over 4 units); Batch & Wet Mix Operator (multiple units, 2 & incl. 4); Blade Operator (motor patrol & attachments, Athey & Huber); Boom Cats (side); Cable Controller (dispatcher); Clamshell Operator (under 3 yds.); Compactor (self-propelled with blade); Concrete Pump Boom Truck; Concrete Slip Form Paver; Cranes (over 25 tons, to and including 45 tons), all attachments including clamshell, dragline; Crusher, Grizzle & Screening Plant Operator; Dozer, 834 R/T & similar; Draglines (under 3 yds.); Drill Doctor; H.D. Mechanic; H.D. Welder; Loader Operator (front-end & overhead, 4 yds. incl. 8 yds.); Multiple Dozer Units with single blade; Paving Machine (asphalt and concrete); Quad-Track or similar equipment; Rollerman (finishing asphalt pavement); Roto Mill (pavement grinder); Scrapers, all, rubber-tired; Screed Operator; Shovel(under 3 yds.); Tractors (D-6 & equivalent & over); Trenching Machines (7 ft. depth & over); Tug Boat Operator Vactor guzzler, super sucker

GROUP 7: Backhoe (over 110,000 gw); Backhoes & Hoe Ram (3 yds & over); Blade (finish & bluetop) Automatic, CMI, ABC, Finish Athey & Huber & similar when used as automatic; Cableway Operators; Concrete Cleaning/Decontamination machine operator; Cranes (over 45 tons to but not including 85 tons), all attachments including clamshell and dragline; Derricks & Stiffleys (65 tons & over); Elevating Belt (Holland type); Heavy equipment robotics operator; Loader (360 degrees revolving Koehring Scooper or similar); Loaders (overhead & front-end, over 8 yds. to 10 yds.); Rubber-tired Scrapers (multiple engine with three or more scrapers); Shovels (3 yds. & over); Whirleys & Hammerheads, ALL

GROUP 8: Cranes (85 tons and over, and all climbing, overhead, rail and tower), all attachments including clamshell, dragline; Loaders (overhead and front-end, 10 yards and over); Helicopter Pilot

BOOM PAY: (All Cranes, Including Tower)

180' to 250' \$.30 over scale

Over 250' \$.60 over scale

NOTE: In computing the length of the boom on Tower Cranes, they shall be measured from the base of the Tower to the point of the boom.

HAZMAT: Anyone working on HAZMAT jobs, working with supplied air shall receive \$1.00 an hour above classification.

ENGI0370G 06/01/2000

Rates Fringes
ADAMS, ASOTIN, BENTON, CHELAN (EAST OF THE 120TH MERIDIAN), COLUMBIA, DOUGLAS (EAST OF THE 120TH MERIDIAN), FERRY, FRANKLIN, GARFIELD, GRANT, LINCOLN, OKANOGAN (EAST OF THE 120TH MERIDIAN), PEND OREILLE, SPOKANE, STEVENS, WALLA WALLA, WHITMAN AND YAKIMA (EAST OF THE 120TH MERIDIAN) COUNTIES

WORK PERFORMED ON HYDRAULIC DREDGES

GROUP 1:	24.23	5.77
GROUP 2:	24.60	5.77
GROUP 3:	24.63	5.77
GROUP 4:	25.02	5.77
GROUP 5:	24.13	5.77

GROUP 1: Assistant Mate (Deckhand) and Oiler

GROUP 2: Assistant Engineer (Electric, Diesel, Steam, or Booster Pump); Mates and Boatmen

GROUP 3: Engineer Welder

GROUP 4: Leverman, Hydraulic

GROUP 5: Maintenance

HEAVY WAGE RATES APPLIES TO CLAM SHELL DREDGE, HOE AND DIPPER, SHOVELS AND SHOVEL ATTACHMENTS, CRANES AND BULLDOZERS.

ENGI0612A 06/01/2001

Rates Fringes
LEWIS, PIERCE, PACIFIC (THAT PORTION WHICH LIES NORTH OF A PARALLEL LINE EXTENDED WEST FROM THE NORTHERN BOUNDARY OF WAHKAUKUM COUNTY TO THE SEA IN THE STATE OF WASHINGTON) AND THURSTON COUNTIES

PROJECTS:

CATEGORY A PROJECTS (excludes Category B projects, as shown below)

POWER EQUIPMENT OPERATORS:

ZONE 1 (0-25 radius miles):

GROUP 1AAA	29.61	8.38
GROUP 1AA	29.11	8.38
GROUP 1A	28.61	8.38
GROUP 1	28.11	8.38
GROUP 2	27.67	8.38
GROUP 3	27.31	8.38
GROUP 4	25.21	8.38

ZONE 2 (26-45 radius miles) - Add \$.70 to Zone 1 rates

ZONE 3 (Over 45 radius miles) - Add \$1.00 to Zone 1 rates

BASEPOINTS: Tacoma, Olympia, and Centralia

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1AAA - Cranes-300 tons, or 300 ft of boom (including jib with attachments)

GROUP 1AA - Cranes 200 tons to 300 tons, or 250 ft of boom (including jib with attachments); Tower crane over 175 ft in height, base to boom

GROUP 1A - Crane 100 tons thru 199 tons, or 150 of boom (including jib with attachments); Crane-overhead, bridge type, 100 tons and over; Shovel, excavator, backhoes-6 yds and over with attachments

GROUP 1 - Cableways; Cranes-45 tons thru 99 tons, under 150 ft of boom (including jib with attachments); Crane-overhead, bridge type - 45 tons thru 99 tons; Excavator, shovel, backhoes over 3 yards and under 6 yards; hard tail end dump articulating off-road equipment 45 yards and over; loader-overhead 6 yards to, but not including 8 yards; Mucking machine, mole, tunnel, drill and/or shield; Quad 9, HD 41, D-10; Remote control operator on rubber tired earth moving equipment; Rollagon; Scrapers-self-propelled-45 yds and over; Slipform pavers; Transporters-all track or truck type

GROUP 2 - Barrier machine (zipper); Batch Plant Operator-concrete; Bump cutter; Cranes-20 tons through 44 tons with attachments; Crane-overhead, bridge type-20 tons thru 44 tons; Chipper, Concrete Pump-truck mounted with boom attachment; Crushers; Deck Engineer/Deck Winches (power); Drilling machine; Excavator, shovel, backhoe-3yards and under; Finishing machine, Bidwell, Gamaco and similar equipment; Guardrail punch; Horizontal/directional drill operator; Loaders, overhead under 6 yds.; Loaders, plant feed; Locomotive-all; Mechanics-all; Mixers, asphalt plant; Motor patrol graders-finishing; Piledriver (other than crane mount); Roto-mill, roto grinder; screedman, spreader, topside operator-Blaw Knox, Cedar Rapids, Jaeger, Caterpillar, Barbar Green; Scraper-self propelled, hard tail end dump, articulating off-road equipment under 45 yds.; Subgrader trimmer; Tractors, backhoes over 75 hp.; Transfer material service machine-shuttle buggy, Blaw Knox-Roadtec; Truck Crane Oiler/driver-100 tons and over, Truck Mount Portable Conveyor; Yo Yo Pay dozer.

GROUP 3 - Conveyors; Cranes-thru 19 tons with attachments; Cranes-A-frame over 10 tons; Drill Oilers-Auger type, truck or crane mount; Dozers-D-9 and under; Forklifts-3000 lbs. and over with attachments; Horizontal/directional drill locator; Outside hoists-(elevators and manlifts), air tuggers, strato tower bucket elevators; Hydralifts/Boom Trucks-over 10 tons; Loaders-elevating type, belt; Motor patrol grader-nonfinishing; Plant Oiler-Asphalt, Crusher; Pumps, Concrete; Roller, plant mix or multi-lift materials; Saws-concrete; Scrapers-Concrete and Carry all; Trenching machines; Truck Crane Oiler/Driver-under 100 tons; Tractor, backhoe-under 75 hp

GROUP 4 - Assistant Engineer; Bobcat; Brooms; Compressor; Concrete Finish Machine-laser screed; Crane-A-Frame, 10 tons and under; Elevator and manlift-permanent and shaft type; Forklifts-under 3000 lbs. with attachments; Gradechecker, stakeop; Hydralifts, boom trucks, 10 tons and under; Oil distributors, blower distribution and mulch seeding operator; Pavement breaker; Posthole Digger-mechanical; Power plant; Pumps-Water; Roller-other than Plant Mix; Wheel Tractors, Farmall type; Shotcrete/Gunite Equipment Operator

CATEGORY B PROJECTS - 95% of the basic hourly rate for each group plus full fringe benefits applicable to Category A projects shall apply to the following projects: Reduced rates may be paid on the following:

1. Projects involving work on structures such as buildings and structures whose total value is less than \$1.5 million excluding mechanical, electrical, and utility portions of the contract.
2. Projects of less than \$1 million where no building is involved. Surfacing and paving included, but utilities excluded.
3. Marine projects (docks, wharfs, etc.) less than \$150,000

WORK PERFORMED ON HYDRAULIC DREDGES:

Total Project cost \$300,000 and over

GROUP 1	26.85	8.38
GROUP 2	26.95	8.38
GROUP 3	27.29	8.38
GROUP 4	27.34	8.38
GROUP 5	28.73	8.38
GROUP 6	26.85	8.38

GROUP 1: Assistant Mate (Deckhand)

GROUP 2: Oiler

GROUP 3: Assistant Engineer (Electric, Diesel, Steam or Booster Pump); Mates and Boatmen

GROUP 4: Craneman, Engineer Welder

GROUP 5: Leverman, Hydraulic

GROUP 6: Maintenance

Total Project Cost under \$300,000

GROUP 1	25.51	8.38
GROUP 2	25.60	8.38
GROUP 3	25.93	8.38
GROUP 4	25.97	8.38
GROUP 5	27.29	8.38
GROUP 6	25.51	8.38

GROUP 1: Assistant Mate (Deckhand)

GROUP 2: Oiler

GROUP 3: Assistant Engineer (Electric, Diesel, Steam or Booster Pump); Mates and Boatmen

GROUP 4: Craneman, Engineer Welder

GROUP 5: Leverman, Hydraulic

GROUP 6: Maintenance

HEAVY WAGE RATES APPLIES TO CLAM SHEEL DREDGE, HOE AND DIPPER, SHOVELS AND SHOVEL ATTACHMENTS, CRANES AND BULLDOZERS

HANDLING OF HAZARDOUS WASTE MATERIALS

H-1 - When not outfitted with protective clothing of level D equipment - Base wage rate

H-2 - Class "C" Suit - Base wage rate + \$.25 per hour

H-3 - Class "B" Suit - Base wage rate + \$.50 per hour

H-4 - Class "A" Suit - Base wage rate +\$.75 per hour

* ENGI0701D 01/01/2002

Rates Fringes
CLARK, COWLITZ, KLINKITAT, PACIFIC (SOUTH), SKAMANIA, AND
WAHIAKUM COUNTIES
POWER EQUIPMENT OPERATORS (See Footnote A)

ZONE 1:

GROUP 1	28.55	8.95
GROUP 1A	29.98	8.95

GROUP 1B	31.41	8.95
GROUP 2	27.34	8.95
GROUP 3	27.60	8.95
GROUP 4	26.09	8.95
GROUP 5	25.50	8.95
GROUP 6	23.20	8.95

Zone Differential (add to Zone 1 rates):

Zone 2 - \$1.50

Zone 3 - 3.00

For the following metropolitan counties: MULTNOMAH; CLACKAMAS; MARION; WASHINGTON; YAMHILL; AND COLUMBIA; CLARK; AND COWLITZ COUNTY, WASHINGTON WITH MODIFICATIONS AS INDICATED:

All jobs or projects located in Multnomah, Clackamas and Marion Counties, West of the western boundary of Mt. Hood National Forest and West of Mile Post 30 on Interstate 84 and West of Mile Post 30 on State Highway 26 and West of Mile Post 30 on Highway 22 and all jobs or projects located in Yamhill County, Washington County and Columbia County and all jobs or projects located in Clark & Cowlitz County, Washington except that portion of Cowlitz County in the Mt. St. Helens "Blast Zone" shall receive Zone I pay for all classifications.

All jobs or projects located in the area outside the identified boundary above, but less than 50 miles from the Portland City Hall shall receive Zone II pay for all classifications.

All jobs or projects located more than 50 miles from the Portland City Hall, but outside the identified border above, shall receive Zone III pay for all classifications.

For the following cities: ALBANY; BEND; COOS BAY; EUGENE; GRANTS PASS; KLAMATH FALLS; MEDFORD; ROSEBURG

All jobs or projects located within 30 miles of the respective city hall of the above mentioned cities shall receive Zone I pay for all classifications.

All jobs or projects located more than 30 miles and less than 50 miles from the respective city hall of the above mentioned cities shall receive Zone II pay for all classifications.

All jobs or projects located more than 50 miles from the respective city hall of the above mentioned cities shall receive Zone III pay for all classifications.

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: CONCRETE: Batch Plant and/or Wet Mix Operator, three units or more; CRANE: Helicopter Operator, when used in erecting work; Whirley Operator, 90 ton and over; LATTICE BOOM CRANE: Operator 200 tons through 299 tons, and/or over 200 feet boom; HYDRAULIC CRANE: Hydraulic Crane Operator 90 tons through 199 tons with luffing or tower attachments; FLOATING EQUIPMENT: Floating Crane, 150 ton but less than 250 ton

GROUP 1A: CRANE: Hydraulic Operator, 200 tons and over (with luffing or tower attachment); LATTICE BOOM CRANE: Operator, 200 tons through 299 tons, with over 200 feet boom; FLOATING EQUIPMENT: Floating Crane 250 ton and over

GROUP 1B: LATTICE BOOM CRANE: Operator, 300 tons through 399 tons with over 200 feet boom; Operator 400 tons and over; FLOATING EQUIPMENT: Floating Crane 350 ton and over

GROUP 2: ASPHALT: Asphalt Plant Operator (any type); Roto Mill, pavement profiler, operator, 6 foot lateral cut and over;

BLADE: Auto Grader or "Trimmer" (Grade Checker required);

Blade Operator, Robotic; BULLDOZERS: Bulldozer operator over

120,000 lbs and above; Bulldozer operator, twin engine; Bulldozer Operator, tandem, quadnine, D10, D11, and similar type); Bulldozere Robotic Equipment (any type; CONCRETE: Batch Plant and/or Wet Mix Operator, one and two drum; Automatic Concrete Slip Form Paver Operator; Concrete Canal Line Operator; Concrete Profiler, Diamond Head; CRANE: Cableway Operator, 25 tons and over; HYDRAULIC CRANE: Hydraulic crane Operator 50 tons through 89 tons (with luffing or tower attachment); hydraulic crane operator 90 tons through 199 tons (with luffing or tower attachment); TOWER/WHIRLEY OPERATOR: Tower Crane Operator; Whirley Operator, under 90 tons; LATTICE BOOM CRANE: 90 through 199 tons and/or 150 to 200 feet boom; CRUSHER: Crusher Plant Operator; FLOATING EQUIPMENT: Floating Clamshell, etc.operator, 3 cu. yds. and over; Floating Crane (derrick barge) Operator, 30 tons but less than 150 tons; LOADERS: Loader Operator, 6 cu. yds. but less than 12 cu. yds.; Loader Operator, 12 cu. yds. and over; Loader 120,000 lbs. and above; REMOTE CONTROL: Remote controlled earth-moving equipment (no one operator shall operate more than two pieces of earth-moving equipment at one time); RUBBER-TIRED SCRAPERS: Rubber-tired Scraper Operator, with tandem scrapers, multi-engine; SHOVEL, DRAGLINE, CLAMSHELL, BACKHOE, SKOOPER OPERATOR: Shovel, etc., 3 cu. yds., but less than 5 cu. yds.; Shovel, etc., 5 cu. yds. and over; TRENCH MACHINE: Wheel Excavator, under 750 cu. yds. per hour (Grade Oiler required); Canal Trimmer (Grade Oiler required); Wheel Excavator, over 750 cu. yds. per hour (two Operators and at least one Grade Oiler required); Band Wagon (in conjunction with wheel excavator); UNDERWATER EQUIPMENT: Underwater Equipment Operator, remote or otherwise; HYDRAULIC HOES EXCAVATOR: Excavator over 130,000 lbs.

GROUP 3: LATTICE BOOM CRANES: Lattice Boom Crane-50 through 89 tons (and less than 150 feet boom); FORKLIFT: Rock Hound Operator; HYDRAULIC HOES EXCAVATOR: excavator over 80,000 lbs. through 130,000 lbs.; LOADERS: Loader operator 60,000 and less than 120,000; RUBBER-TIRED SCRAPERS: Scraper Operator, with tandem scrapers; SHOVEL, DRAGLINE, CLAMSHELL,SKOOPER OPERATOR: Shovel, Dragline, Clamshell operators 3 cu. yds. but less than 5 cu yds.; Self Loading, paddle wheel, auger type, finish and/or 2 or more units; BULLDOZERS: Bulldozer operator over 70,000 lbs. up to and including 120,000

GROUP 4: ASPHALT: Blade Operator; Blade Operator, finish; Screed Operator; Asphalt Paver Operator (Screed man required); Diesel-Electric engineer, Plant; Roto-Mill, pavement profiler, operator, under six foot lateral cut; BLADE: Blade Operator, externally controlled by electronic, mechanical hydraulic means; Blade operator, multi-engine; BULLDOZERS: Bulldozer Operator over 20,000 lbs and more than 100 horse up to 70,000 lbs; Drill Cat Operator; Side-boom Operator; Cable-Plow Operator (any type); CLEARING: Log Skidders; Chippers; Incinerator; Stump Splitter (loader mounted or similar type); Stump Grinder (loader mounted or similar type); Tub Grinder; Land Clearing Machine (Track mounted forestry mowing & Grinding machine); Hydro Axe (loader mounted or similar type); COMPACTORS SELF PROPELLED: Compactor Operator, with blade; Compactor Operator, multi-engine; Compactor Operator, robotic; CONCRETE: Mixer Mobile Operator; Screed Operator; Concrete Cooling Machine Operator; Concrete Paving Road Mixer; Concrete Breaker; Reinforced Tank Banding

Machine (K-17 or similar types); Laser Screed; CRANE: Chicago boom and similar types; Lift Slab Machine Operator; Boom type lifting device, 5 ton capacity or less; Hoist Operator, two (2) drum; Hoist Operator, three (3) or more drums; Derrick Operator, under 100 ton; Hoist Operator, stiff leg, guy derrick or similar type, 50 ton and over; Cableway Operator up to twenty (25) ton; Bridge Crane Operator, Locomotive, Gantry, Overhead; Cherry Picker or similar type crane hoist five (5) ton capacity or less; Hydraulic Crane Operator, under 50 tons; LATTICE BOOM CRANE OPERATOR: Lattice Boom Crane Operator, under 50 tons; CRUSHER: Generator Operator; Diesel-Electric Engineer; Grizzley Operator; DRILLING: Drill Doctor; Boring Machine Operator; Driller-Perussion, Diamond, Core, Cable, Rotary and similar type; Cat Drill (John Henry); Directional Drill Operator over 20,000 lbs pullback; FLOATING EQUIPMENT: Diesel-electric Engineer; Jack Operator, elevating barges, Barge Operator, self-unloading; Piledriver Operator (not crane type) (Deckhand required); Floating Clamshell, etc. Operator, under 3 cu. yds. (Fireman or Diesel-Electric Engineer required); Floating Crane (derrick barge) Operator, less than 30 tons; GENERATORS: Generator Operator; Diesel-electric Engineer; GUARDRAIL EQUIPMENT: Guardrail Punch Operator (all types); Guardrail Auger Operator (all types); Combination Guardrail machines, i.e., punch auger, etc.; HEATING PLANT: Surface Heater and Planer Operator; HYDRAULIC HOES EXCAVATOR: Robotic Hydraulic backhoe operator, track and wheel type to yp to including 20,000 lbs. with any or all attachments; Excavator Operator over 20,000 lbs through 80,000 lbs.; LOADERS: Belt Loaders, Kolman and Ko Cal types; Loaders Operator, front end and overhead, 25,000 lbs and less than 60,000 lbs; Elevating Grader Operator by Tractor operator, Sierra, Euclid or similar types; PILEDRIVERS: Hammer Operator; Piledriver Operator (not crane type); PIPELINE, SEWER WATER: Pipe Cleaning Machine Operator; Pipe Doping Machine Operator; Pipe Bending Machine Operator; Pipe Wrapping Machine Operator; Boring Machine Operator; Back Filling Machine Operator; REMOTE CONTROL: Concrete Cleaning Decontamination Machine Operator; Ultra High Pressure Water Jet Cutting Tool System Operator/Mechanic; Vacuum Blasting Machine Operator/mechanic; REPAIRMEN, HEAVY DUTY: Diesel Electric Engineer (Plant or Flating Floating; Bolt Threading Machine operator; Drill Doctor (Bit Grinder); H.D. Mechanic; H.D. Welder; Machine Tool Operator; Combination H.D. Mechanic-Welder, when dispatched and/or when required to do both; Welder-Certified, when dispatched and/or required; RUBBER-TIRED SCRAPERS: Rubber-tired Scraper Operator, single engine, single scraper; Self-loading, paddle wheel, auger type under 15 cu. yds.; Rubber-tired Scraper Operator, twin engine; Rubber-tired Scraper Operator, with push-pull attachments; Self Loading, paddle wheel, auger type 15 cu. yds. and over, single engine; Water pulls, water wagons; SHOVEL, DRAGLINE, CLAMSHELL, BACKHOE, SKOOPER OPERATOR: Diesel Electric Engineer; Stationay Drag Scraper Operator; Shovel, Dragline, Clamshell, Operator under 3 cy yds.; Grade-all Operator; Shovel, Dragline, Clamshell, Operator 3 cu yds, but less than 5 cu yds. GROUP 5: ASPHALT: Extrusion Machine Operator; Roller Operator (any asphalt mix); Asphalt Burner and Reconditioner Operator (any type), 84; Roto-Mill, pavement profiler, ground man BULLDOZERS: Bulldozer operator, 20,000 lbs. or less or 100 horse or less;

COMPRESSORS: Compressor Operator any power), over 1,250 cu. ft. total capacity; COMPACTORS: Compactor Operator, including vibratory; Wagner Pactor Operator or similar type (without blade); CONCRETE: Combination mixer and Compressor Operator, gunite work; Concrete Batch Plant Quality Control Operator; Belcrete Operator; Pumpcrete Operator (any type); Pavement Grinder and/or Grooving Machine Operator (riding type); Cement Pump Operator, Fuller-Kenyon and similar; Concrete Pump Operator; Grouting Machine Operator; Concrete mixer operator, single drum, under five (5) bag capacity; Concrete Mixer Operator, single drum, under 5 bag capacity and over; Cast place pipe laying machine; Maginnis Internal Full Slab Vibrator Operator; Concrete Finishing machine Operator, Clary, Johnson, Bidwell, Burgess bridge deck or similar type; Curb Machine Operator, mechanical Berm, Curb and/or Curb and Gutter; Concrete Joint Machine Operator; Concrete Planer Operator; Tower Mobile Operator; Power Jumbo Operator setting slip forms; Slip Form Pumps, power driven hydraulic lighting device for concrete forms; Concrete Paving Machine Operator; Concrete Finishing Machine Operator; Concrete Spreader Operator; CRANE: Helicopter Hoist Operator; Hoist Operator, single drum; Elevator Operator; A-frame Truck Operator, Double drum; Boom Truck Operator; HYDRAULIC CRANE OPERATOR: Hydraulic Boom Truck, Pittman; DRILLING: Churm Drill and Earth Boring Machine Operator; Directional Drill Operator over 20,000 lbs pullback; FLOATING EQUIPMENT: Fireman; FORKLIFT: Lull Hi-Lift Operator or similar type; Fork Lift, over 5 ton and/or robotic; HYDRAULIC HOES EXCAVATORS: Hydraulic Backhoe Operator, wheel type (Ford, John Deere, Case type); Hydraulic Backhoe Operator track type up to and including WHEEL 20,000 lbs.; LOADERS: Loaders, rubber-tired type, less than 25,000 lbs; Elevating Grader Operator, Tractor Towed requiring Operator or Grader; OILERS: Service Oiler (Greaser); PIPELINE, SEWER WATER: Hydraulic Pipe Press Operator; Hydra Hammer or similar types; Pavement Breaker Operator; PUMPS: Pump Operator, more than 5 (any size); Pot Rammer Operator; RAILROAD EQUIPMENT: Locomotive Operator, under 40 tons; Ballast Regulator Operator; Ballast Tamper Multi-Purpose Operator; Track Liner Operator; Tie Spacer Operator; Shuttle Car Operator; Locomotive Operator, 40 tons and over; SWEEPERS: Sweeper operator (Wayne type) self propelled

GROUP 6: ASPHALT: Plant Oiler; Plant Fireman; Pugmill Operator (any type); Truck mounted asphalt spreader, with screed; COMPRESSORS: Compressor Operator (any power), under 1,250 cu. ft. total capacity; CONCRETE: Plant Oiler, Assistant Conveyor Operator; Conveyor Operator; Mixer Box Operator (C.T.B., dry batch, etc.); Cement Hog Operator; Concrete Saw Operator; Concrete Curing Machine Operator (riding type); Wire Mat or Brooming Machine Operator; CRANE: Oiler; Fireman, all equipment; Truck Crane Oiler Driver; A-frame Truck Operator, single drum; Tugger or Coffin Type Hoist Operator; CRUSHER: Crusher Oiler; Crusher Feeder; DRILLING: Drill Tender; Auger Oiler; FLOATING EQUIPMENT: Deckhand; Boatman; FORKLIFT: Self-propelled Scaffolding Operator, construction job site (exclduing working platform); Fork Lift or Lumber Stacker Operator, construction job site; Ross Carrier Operator, construction job site; GUARDRAIL EQUIPMENT: Oiler; Auger Oiler; Oiler, combination guardrail machines; Guardrail Punch Oiler; HEATING PLANT: Temporary Heating

Plant Operator; LOADERS: Bobcat, skid steer (less than 1 cu yd.); Bucket Elevator Loader Operator, BarberGreene and similar types; OILERS: Oiler; Guardrail Punch Oiler; Truck Crane Oiler-Driver; Auger Oiler; Grade Oiler, required to check grade; Grade Checker; PIPELINE SEWER WATER: Tar Pot Fireman; Tar Pot Fireman (power agitated); PUMPS: Pump Operator (any power); Hydrostatic Pump Operator; RAILROAD EQUIPMENT: Brakeman; Oiler; Switchman; Motorman; Ballast Jack Tamper Operator; SHOVEL, DRAGLINE, CLAMSHELL, SKOOPER, ETC. OPERATOR: Oiler, Grade Oiler (required to check grade); Grade Checker; Fireman; SWEEPER: Broom operator, self propelled, construction job site

 ENGI0701E 06/01/2001

Rates Fringes
 CLARK, COWLITZ, KLUCKITAT, PACIFIC (SOUTH), SKAMANIA,
 AND WAHIAKUM COUNTIES
 DREDGING:

	Rates	Fringes
ZONE A		
LEVERMAN, HYDRAULIC	31.80	7.75
LEVERMAN, DIPPER, FLOATING CLAMSHELL	31.80	7.75
ASSISTANT ENGINEER	29.69	7.75
TENDERMAN	28.72	7.75
ASSISTANT MATE	26.15	7.75
ZONE B		
LEVERMAN, HYDRAULIC	33.80	7.75
LEVERMAN, DIPPER, FLOATING CLAMSHELL	33.80	7.75
ASSISTANT ENGINEER	31.69	7.75
TENDERMAN	30.72	7.75
ASSISTANT MATE	28.15	7.75
ZONE C		
LEVERMAN, HYDRAULIC	34.80	7.75
LEVERMAN, DIPPER, FLOATING CLAMSHELL	34.80	7.75
ASSISTANT ENGINEER	32.69	7.75
TENDERMAN	31.72	7.75
ASSISTANT MATE	29.15	7.75

ZONE DESCRIPTION FOR DREDGING:

ZONE A - All jobs or projects located within 30 road miles of Portland City Hall.

ZONE B - Over 30-50 road miles from Portland City Hall.

ZONE C - Over 50 road miles from Portland City Hall.

*All jobs or projects shall be computed from the city hall by the shortest route to the geographical center of the project.

 IRON0014F 07/01/2001

	Rates	Fringes
ADAMS, ASOTIN, BENTON, COLUMBIA, DOUGLAS, FERRY, FRANKLIN, GARFIELD, GRANT, LINCOLN, OKANOGAN, PEND ORIELLE, SPOKANE, STEVENS, WALLA WALLA AND WHITMAN COUNTIES		
IRONWORKERS	24.52	11.35

 IRON0029I 07/01/2001

	Rates	Fringes
CLARK, CLALLAM, CHELAN, COWLITZ, GRAYS HARBOR, ISLAND, JEFFERSON, KING, KITTITAS, KLUCKITAT, KITSAP, LEWIS, MASON, PACIFIC, PIERCE,		

SKAGIT, SKAMANIA, SNOHOMISH, THURSTON, WAHKAIAKUM, WHATCOM AND
YAKIMA COUNTIES

IRONWORKERS	25.82	11.35
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LAB00001D 06/01/2001

	Rates	Fringes
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CHELAN, DOUGLAS (WEST OF THE 120TH MERIDIAN), KITTITAS AND
YAKIMA COUNTIES

LABORERS:

ZONE 1:

GROUP 1	14.46	5.80
GROUP 2	16.78	5.80
GROUP 3	18.50	5.80
GROUP 4	18.98	5.80
GROUP 5	19.34	5.80

ZONE DIFFERENTIAL (ADD TO ZONE 1 RATES):

ZONE 2 - \$.70

ZONE 3 - \$1.00

BASE POINTS: CHELAN, SUNNYSIDE, WENATCHEE,
AND YAKIMA

ZONE 1 - Projects within 25 radius miles of the respective city
hall

ZONE 2 - More than 25 but less than 45 radius miles from the
respective city hall

ZONE 3 - More than 45 radius miles from the respective city hall
CALLAM, GRAYS HARBOR, ISLAND, JEFFERSON, KING, KITSAP, LEWIS,
MASON, PACIFIC (NORTH OF STRAIGHT LINE MADE BY EXTENDING THE
NORTH BOUNDARY WAHKAIAKUM COUNTY WEST TO THE PACIFIC OCEAN),
PIERCE, SAN JUAN, SKAGIT, SNOHOMISH, THURSTON AND WHATCOM
COUNTIES

LABORERS:

ZONE 1:

GROUP 1	16.92	5.80
GROUP 2	19.24	5.80
GROUP 3	23.92	5.80
GROUP 4	24.40	5.80
GROUP 5	24.76	5.80

ZONE DIFFERENTIAL (ADD TO ZONE 1 RATES):

ZONE 2 - \$.70

ZONE 3 - \$1.00

BASE POINTS: BELLINGHAM, MT. VERNON, EVERETT,
SEATTLE, KENT, TACOMA, OLYMPIA,
CENTRALIA, ABERDEEN, SHELTON, PT.
TOWNSEND, PT. ANGELES, AND BREMERTON

ZONE 1 - Projects within 25 radius miles of the respective city
hall

ZONE 2 - More than 25 but less than 45 radius miles from the
respective city hall

ZONE 3 - More than 45 radius miles from the respective city hall

LABORERS CLASSIFICATIONS

GROUP 1: Landscaping and Planting; Watchman; Window
Washer/Cleaner (detail clean-up, such as but not limited to
cleaning floors, ceilings, walls, windows, etc., prior to final
acceptance by the owner)

GROUP 2: Batch Weighman; Crusher Feeder; Fence Laborer;
Flagman; Pilot Car

GROUP 3: General Laborer; Air, Gas, or Electric Vibrating

Screed; Asbestos Abatement Laborer; Ballast Regulator Machine; Brush Cutter; Brush Hog Feeder; Burner; Carpenter Tender; Cement Finisher Tender; Change House or Dry Shack; Chipping Gun (under 30 lbs.); Choker Setter; Chuck Tender; Clean-up Laborer; Concrete Form Stripper; Curing Laborer; Demolition (wrecking and moving including charred material); Ditch Digger; Dump Person; Fine Graders; Firewatch; Form Setter; Gabian Basket Builders; Grout Machine Tender; Grinders; Guardrail Erector; Hazardous Waste Worker (Level C); Maintenance Person; Material Yard Person; Pot Tender; Rip Rap Person; Riggers; Scale Person; Sloper Sprayer; Signal Person; Stock Piler; Stake Hopper; Toolroom Man (at job site); Topper-Tailer; Track Laborer; Truck Spotter; Vinyl Seamer

GROUP 4: Cement Dumper-Paving; Chipping Gun (over 30 lbs.); Clary Power Spreader; Concrete Dumper/Chute Operator; Concrete Saw Operator; Drill Operator (hydraulic, diamond, aiartrac); Faller and Bucker Chain Saw; Grade Checker and Transit Person; Groutmen (pressure) including post tension beams; Hazardous Waste Worker (Level B); High Scaler; Jackhammer; Laserbeam Operator; Manhole Builder-Mudman; Mortarman and Hodcarrier; Nozzlemann (concrete pump, green cutter when using combination of high pressure air and water on concrete and rock, sandblast, gunite, shotcrete, water blaster, vacuum blaster); Pavement Breaker; Pipe Layer and Caulker; Pipe Pot Tender; Pipe Reliner (not insert type); Pipe Wrapper; Power Jacks; Railroad Spike Puller-Power; Raker-Asphalt; Rivet Buster; Rodder; Sloper (over 20'); Spreader (concrete); Tamper and Similar electric, air and glas operated tool; Timber Person-sewer (lagger shorer and cribber); Track Liner Power; Tugger Operator; Vibrator; Well Point Laborer

GROUP 5: Caisson Worker; Miner; Powderman; Re-Timberman; Hazardous Waste Worker (Level A).

LAB00238E 06/01/2001

	Rates	Fringes
ADAMS, ASOTIN, BENTON, COLUMBIA, DOUGLAS (EAST OF THE 120TH MERIDIAN), FERRY, FRANKLIN, GARFIELD, GRANT, LINCOLN, OKANOGAN, PEND OREILLE, STEVENS, SPOKANE, WALLA WALLA AND WHITMAN COUNTIES		

LABORERS:

ZONE 1:

GROUP 1	17.66	5.00
GROUP 2	19.76	5.00
GROUP 3	20.03	5.00
GROUP 4	20.30	5.00
GROUP 5	20.58	5.00
GROUP 6	21.95	5.00

Zone Differential (Add to Zone 1 rate): \$2.00

BASE POINTS: Spokane, Moses Lake, Pasco, Lewiston

Zone 1: 0-45 radius miles from the main post office.

Zone 2: 45 radius miles and over from the main post office.

LABORERS CLASSIFICATIONS

GROUP 1: Flagman; Landscape Laborer; Scaleman; Traffic Control Maintenance Laborer (to include erection and maintenance of barricades, signs and relief of flagperson); Window Washer/Cleaner (detail cleanup, such as, but not limited to cleaning floors, ceilings, walls, windows, etc. prior to final acceptance by the owner)

GROUP 2: Asbestos Abatement Worker; Brush Hog Feeder; Carpenter Tender; Cement Handler; Clean-up Laborer; Concrete Crewman (to include stripping of forms, hand operating jacks on slip form construction, application of concrete curing compounds, pumpcrete machine, signaling, handling the nozzle of squeezecrete or similar machine, 6 inches and smaller); Confined Space Attendant; Concrete Signalman; Crusher Feeder; Demolition (to include clean-up, burning, loading, wrecking and salvage of all material); Dumpman; Fence Erector; Firewatch; Form Cleaning Machine Feeder, Stacker; General Laborer; Grout Machine Header Tender; Guard Rail (to include guard rails, guide and reference posts, sign posts, and right-of-way markers); Hazardous Waste Worker, Level D (no respirator is used and skin protection is minimal); Miner, Class "A" (to include all bull gang, concrete crewman, dumpman and pumpcrete crewman, including distributing pipe, assembly & dismantle, and nipper); Nipper; Riprap Man; Sandblast Tailhoseman; Scaffold Erector (wood or steel); Stake Jumper; Structural Mover (to include separating foundation, preparation, cribbing, shoring, jacking and unloading of structures); Tailhoseman (water nozzle); Timber Bucker and Faller (by hand); Track Laborer (RR); Truck Loader; Well-Point Man; All Other Work Classifications Not Specially Listed Shall Be Classified As General Laborer

GROUP 3: Asphalt Raker; Asphalt Roller, walking; Cement Finisher Tender; Concrete Saw, walking; Demolition Torch; Dope Pot Firemen, non-mechanical; Driller Tender (when required to move and position machine); Form Setter, Paving; Grade Checker using level; Hazardous Waste Worker, Level C (uses a chemical "splash suit" and air purifying respirator); Jackhammer Operator; Miner, Class "B" (to include brakeman, finisher, vibrator, form setter); Nozzleman (to include squeeze and flo-crete nozzle); Nozzleman, water, air or steam; Pavement Breaker (under 90 lbs.); Pipelayer, corrugated metal culvert; Pipelayer, multi-plate; Pot Tender; Power Buggy Operator; Power Tool Operator, gas, electric, pneumatic; Railroad Equipment, power driven, except dual mobile power spiker or puller; Railroad Power Spiker or Puller, dual mobile; Rodder and Spreader; Tamper (to include operation of Barco, Essex and similar tampers); Trencher, Shawnee; Tugger Operator; Wagon Drills; Water Pipe Liner; Wheelbarrow (power driven)

GROUP 4: Air and Hydraulic Track Drill; Brush Machine (to include horizontal construction joint cleanup brush machine, power propelled); Caisson Worker, free air; Chain Saw Operator and Faller; Concrete Stack (to include laborers when laborers working on free standing concrete stacks for smoke or fume control above 40 feet high); Guniting (to include operation of machine and nozzle); Hazardous Waste Worker, Level B (uses same respirator protection as Level A. A supplied air line is provided in conjunction with a chemical "splash suit"); High Scaler; Laser Beam Operator (to include grade checker and elevation control); Miner, Class C (to include miner, nozzleman for concrete, laser beam operator and rigger on tunnels); Monitor Operator (air track or similar mounting); Mortar Mixer; Nozzleman (to include jet blasting nozzleman, over 1,200 lbs., jet blast machine power propelled, sandblast nozzle); Pavement Breaker (90 lbs. and over); Pipelayer (to include working topman, caulker, collarman, jointer, mortarman, rigger, jacker, shorer, valve or

meter installer); Pipewrapper; Plasterer Tender; Vibrators (all)
GROUP 5 - Drills with Dual Masts; Hazardous Waste Worker, Level
A (utilizes a fully encapsulated suit with a self-contained
breathing apparatus or a supplied air line); Miner Class "D", (to
include raise and shaft miner, laser beam operator on riases and
shafts)

GROUP 6 - Powderman

LAB00238G 06/01/2001

	Rates	Fringes
COUNTIES EAST OF THE 120TH MERIDIAN: ADAMS, ASOTIN, BENTON, COLUMBIA, DOUGLAS, FERRY, FRANKLIN, GARFIELD, GRANT, LINCOLN, OKANOGAN, PEND OREILLE, STEVENS, SPOKANE, WALLA WALLA, WHITMAN HOD CARRIERS	21.35	5.00

LAB00335A 06/01/2001

	Rates	Fringes
CLARK, COWLITZ, KLICKITAT, PACIFIC (SOUTH OF A STRAIGHT LINE MADE BY EXTENDING THE NORTH BOUNDARY LINE OF WAHAKIUM COUNTY WEST TO THE PACIFIC OCEAN), SKAMANIA AND WAHAKIUM COUNTIES		

ZONE 1:

LABORERS:

GROUP 1	22.27	6.75
GROUP 2	22.77	6.75
GROUP 3	23.15	6.75
GROUP 4	23.47	6.75
GROUP 5	20.12	6.75
GROUP 6	18.06	6.75
GROUP 7	15.36	6.75

Zone Differential (Add to Zone 1 rates):

Zone 2 \$ 0.65
Zone 3 - 1.15
Zone 4 - 1.70
Zone 5 - 2.75

BASE POINTS: GOLDENDALE, LONGVIEW, AND VANCOUVER

ZONE 1: Projects within 30 miles of the respective city all.

ZONE 2: More than 30 miles but less than 40 miles from the
respective city hall.

ZONE 3: More than 40 miles but less than 50 miles from the
respective city hall.

ZONE 4: More than 50 miles but less than 80 miles from the
respective city hall.

ZONE 5: More than 80 miles from the respective city hall.

LABORERS CLASSIFICATIONS

GROUP 1: Asphalt Plant Laborers; Asphalt Spreaders; Batch
Weighman; Broomers; Brush Burners and Cutters; Car and Truck
Loaders; Carpenter Tender; Change-House Man or Dry Shack Man;
Choker Setter; Clean-up Laborers; Curing, Concrete; Demolition,
Wrecking and Moving Laborers; Dumpers, road oiling crew; Dumpmen
(for grading crew); Elevator Feeders; Guard Rail, Median Rail
Reference Post, Guide Post, Right of Way Marker; Fine Graders;
Fire Watch; Form Strippers (not swinging stages); General
Laborers; Hazardous Waste Worker; Leverman or Aggregate Spreader
(Flaherty and similar types); Loading Spotters; Material Yard Man
(including electrical); Pittsburgh Chipper Operator or Similar
Types; Railroad Track Laborers; Ribbon Setters (including steel
forms); Rip Rap Man (hand placed); Road Pump Tender; Sewer Labor;

Signalman; Skipman; Slopers; Spraymen; Stake Chaser; Stockpiler; Tie Back Shoring; Timber Faller and Bucker (hand labor); Toolroom Man (at job site); Tunnel Bullgang (above ground); Weight-Man-Crusher (aggregate when used)

GROUP 2: Applicator (including pot power tender for same), applying protective material by hand or nozzle on utility lines or storage tanks on project; Brush Cutters (power saw); Burners; Choker Splicer; Clary Power Spreader and similar types; Clean-up Nozzelman-Green Cutter (concrete, rock, etc.); Concrete Power Buggyman; Concrete Laborer; Crusher Feeder; Demolition and Wrecking Charred Materials; Gunite Nozzelman Tender; Gunite or Sand Blasting Pot Tender; Handlers or Mixers of all Materials of an irritating nature (including cement and lime); Tool Operators (includes but not limited to: Dry Pack Machine; Jackhammer; Chipping Guns; Paving Breakers); Pipe Doping and Wrapping; Post Hole Digger, air, gas or electric; Vibrating Screed; Tampers; Sand Blasting (Wet); Stake-Setter; Tunnel-Muckers, Brakemen, Concrete Crew, Bullgang (underground)

GROUP 3: Asbestos Removal; Bit Grinder; Drill Doctor; Drill Operators, air tracks, cat drills, wagon drills, rubber-mounted drills, and other similar types including at crusher plants; Gunite Nozzelman; High Scalers, Strippers and Drillers (covers work in swinging stages, chairs or belts, under extreme conditions unusual to normal drilling, blasting, barring-down, or sloping and stripping); Manhole Builder; Powdermen; Concrete Saw Operator; Powdermen; Power Saw Operators (Bucking and Falling); Pumpcrete Nozzlemen; Sand Blasting (Dry); Sewer Timberman; Track Liners, Anchor Machines, Ballast Regulators, Multiple Tampers, Power Jacks, Tugger Operator; Tunnel-Chuck Tenders, Nippers and Timbermen; Vibrator; Water Blaster

GROUP 4: Asphalt Raker; Concrete Saw Operator (walls); Concrete Nozzelman; Grade Checker; Pipelayer; Laser Beam (pipelaying)-applicable when employee assigned to move, set up, align; Laser Beam; Tunnel Miners; Motorman-Dinky Locomotive-Tunnel; Powderman-Tunnel; Shield Operator-Tunnel

GROUP 5: Traffic Flaggers

GROUP 6: Fence Builders

GROUP 7: Landscaping or Planting Laborers

LAB00335L 06/01/2001

	Rates	Fringes
CLARK, COWLITZ, KLICKITAT, PACIFIC (SOUTH OF A STRAIGHT LINE MADE BY EXTENDING THE NORTH BOUNDARY LINE OF WAHIAKUM COUNTY WEST TO THE PACIFIC OCEAN), SKAMANIA AND WAHIAKUM COUNTIES		
HOD CARRIERS	24.61	5.75

PAIN0005B 06/01/2000

	Rates	Fringes
STATEWIDE EXCEPT CLARK, COWLITZ, KLICKITAT, PACIFIC (SOUTH), SKAMANIA, AND WAHIAKUM COUNTIES		
STRIPERS	20.65	5.85

PAIN0005D 03/01/2000

	Rates	Fringes
CLALLAM, GRAYS HARBOR, ISLAND, JEFFERSON, KING, KITSAP, LEWIS, MASON, PIERCE, SKAGIT, SNOHOMISH, THURSTON AND WHATCOM COUNTIES		
PAINTERS	22.94	3.73

PAIN0005G 07/01/2001

	Rates	Fringes
ADAMS, ASOTIN; BENTON AND FRANKLIN (EXCEPT HANFORD SITE); CHELAN, COLUMBIA, DOUGLAS, FERRY, GARFIELD, GRANT, KITTITAS, LINCOLN, OKANOGAN, PEND OREILLE, SPOKANE, STEVENS, WALLA WALLA, WHITMAN AND YAKIMA COUNTIES		
PAINTERS*:		
Brush, Roller, Striping,		
Steam-cleaning and Spray	19.17	4.24
Application of Cold Tar		
Products, Epoxies, Polyure		
thanes, Acids, Radiation		
Resistant Material, Water and		
Sandblasting, Bridges, Towers,		
Tanks, Stacks, Steeples	20.17	4.24
TV Radio, Electrical Transmission		
Towers	20.92	4.24
Lead Abatement, Asbestos		
Abatement	20.17	4.24

*\$.70 shall be paid over and above the basic wage rates listed for work on swing stages and high work of over 30 feet.

PAIN0055C 11/01/1999

	Rates	Fringes
CLARK, COWLITZ, KLICKITAT, PACIFIC, SKAMANIA, AND WAHKIAKUM COUNTIES		
PAINTERS:		
Brush & Roller	17.10	3.48
Spray and Sandblasting	17.70	3.48
High work - All work		
60 ft. or higher	17.60	3.48

PAIN0055L 06/01/2000

	Rates	Fringes
CLARK, COWLITZ, KLICKITAT, SKAMANIA and WAHKIAKUM COUNTIES		
PAINTERS:		
HIGHWAY AND PARKING LOT		
STRIPER	21.88	4.76

PLAS0072E 06/01/1999

	Rates	Fringes
ADAMS, ASOTIN, BENTON, CHELAN, COLUMBIA, DOUGLAS, FERRY, FRANKLIN, GARFIELD, GRANT, KITTITAS, LINCOLN, OKANOGAN, PEND OREILLE, SPOKANE, STEVENS, WALLA WALLA, WHITMAN, AND YAKIMA COUNTIES		
ZONE 1:		
CEMENT MASONS	21.57	5.24
Zone Differential (Add to Zone 1		
rate): Zone 2 - \$2.00		
BASE POINTS: Spokane, Pasco, Moses Lake, Lewiston		
Zone 1: 0 - 45 radius miles from the main post office		
Zone 2: Over 45 radius miles from the main post office		

PLAS0528A
PLAS0528A 12/01/2001

	Rates	Fringes
--	-------	---------

CLALLAM, GRAYS HARBOR, ISLAND, JEFFERSON, KING, KITSAP, LEWIS,
MASON, PACIFIC (NORTH), PIERCE, SAN JUAN, SKAGIT, SNOHOMISH,
THURSTON, AND WHATCOM COUNTIES

CEMENT MASON	27.16	8.99
COMPOSITION, COLOR MASTIC, TROWEL MACHINE, GRINDER, POWER TOOLS, GUNNITE NOZZLE	26.41	8.99

PLAS0555B 06/01/2001

	Rates	Fringes
CLARK, COWLITZ, KLUCKITAT, PACIFIC (SOUTH), SKAMANIA, AND WAHIAKUM COUNTIES		

ZONE 1:

CEMENT MASONS	24.04	9.00
COMPOSITION WORKERS AND POWER MACHINERY OPERATORS	24.48	9.00
CEMENT MASONS ON SUSPENDED, SWINGING AND/OR HANGING SCAFFOLD	24.48	9.00
CEMENT MASONS DOING BOTH COMPOSITION/POWER MACHINERY AND SUSPENDED/HANGING SCAFFOLD	24.93	9.00

Zone Differential (Add To Zone 1 Rates):

Zone 2 - \$0.65
Zone 3 - 1.15
Zone 4 - 1.70
Zone 5 - 2.75

BASE POINTS: BEND, CORVALLIS, EUGENE, LONGVIEW, MEDFORD,
PORTLAND, SALEM, THE DALLES, VANCOUVER

ZONE 1: Projects within 30 miles of the respective city hall

ZONE 2: More than 30 miles but less than 40 miles from the
respective city hall.

ZONE 3: More than 40 miles but less than 50 miles from the
respective city hall.

ZONE 4: More than 50 miles but less than 80 miles from the
respective city hall.

ZONE 5: More than 80 miles from the respective city hall

PLUM0032B 06/01/2001

	Rates	Fringes
CLALLAM, KING AND JEFFERSON COUNTIES PLUMBERS AND PIPEFITTERS	31.38	11.23

PLUM0032D 06/01/1999

	Rates	Fringes
CHELAN, KITTITAS (NORTHERN TIP), DOUGLAS (NORTH), AND OKANOGAN (NORTH) COUNTIES		
PLUMBERS AND PIPEFITTERS	23.47	8.67

PLUM0044C 06/01/2001

	Rates	Fringes
ADAMS (NORTHERN PART), ASOTIN (CLARKSTON ONLY), FERRY (EASTERN PART), LINCOLN (EASTERN PART), PEND ORIELLE, STEVENS, SPOKANE, AND WHITMAN COUNTIES		
PLUMBERS AND PIPEFITTERS	26.21	9.14

PLUM0082A 06/01/2001		
	Rates	Fringes
CLARK (NORTHERN TIP INCLUDING WOODLAND), COWLITZ, GRAYS HARBOR, LEWIS, MASON (EXCLUDING NE SECTION), PACIFIC, PIERCE SKAMANIA, THURSTON AND WAHIAKUM COUNTIES		
PLUMBERS AND PIPEFITTERS	24.57	14.72

PLUM0265C 06/01/2001		
	Rates	Fringes
ISLAND, SKAGIT, SNOHOMISH, SAN JUAN AND WHATCOM COUNTIES		
PLUMBERS AND PIPEFITTERS	28.37	10.24

PLUM0290K 10/01/2001		
	Rates	Fringes
CLARK (ALL EXCLUDING NORTHERN TIP INCLUDING CITY OF WOODLAND)		
PLUMBERS AND PIPEFITTERS	31.52	10.80

PLUM0598E 06/01/2001		
	Rates	Fringes
ADAMS (SOUTHERN PART), ASOTIN (EXCLUDING THE CITY OF CLARKSTON), BENTON, COLUMBIA, DOUGLAS (EASTERN HALF), FERRY (WESTERN PART), FRANKLIN, GARFIELD, GRANT, KITTITAS (ALL BUT NORTHERN TIP), KLICKITAT, LINCOLN (WESTERN PART), OKANOGAN (EASTERN), WALLA WALLA AND YAKIMA COUNTIES		
PLUMBERS	28.85	11.55

PLUM0631A 06/01/2001		
	Rates	Fringes
MASON (NE SECTION), AND KITSAP COUNTIES PLUMBERS/PIPEFITTERS: All new construction, additions, and remodeling of commercial building projects such as: cocktail lounges and taverns, professional buildings, medical clinics, retail stores, hotels and motels, restaurants and fast food types, gasoline service stations, and car washes where the plumbing and mechanical cost of the project is less than \$100,000	14.55	7.98
All other work where the plumbing and mechanical cost of the project is \$100,000 and over	24.65	13.41

TEAM0037C 06/01/2001		
	Rates	Fringes
CLARK, COWLITZ, KLICKITAT, PACIFIC (South of a straight line made by extending the north boundary line of Wahkiakum County west to the Pacific Ocean), SKAMANIA, AND WAHIAKUM COUNTIES		
TRUCK DRIVERS		
ZONE 1:		
GROUP 1	23.40	8.30
GROUP 2	23.52	8.30
GROUP 3	23.65	8.30

GROUP 4	23.91	8.30
GROUP 5	24.13	8.30
GROUP 6	24.29	8.30
GROUP 7	24.49	8.30

Zone Differential (Add to Zone 1 Rates):

Zone 2 - \$0.65

Zone 3 - 1.15

Zone 4 - 1.70

Zone 5 - 2.75

BASE POINTS: ASTORIA, THE DALLES, LONGVIEW AND VANCOUVER

ZONE 1: Projects within 30 miles of the respective city hall.

ZONE 2: More than 30 miles but less than 40 miles from the respective city hall.

ZONE 3: More than 40 miles but less than 50 miles from the respective city hall.

ZONE 4: More than 50 miles but less than 80 miles from the respective city hall.

ZONE 5: More than 80 miles from the respective city hall.

TRUCK DRIVERS CLASSIFICATIONS

GROUP 1: A Frame or Hydra lift truck w/load bearing surface; Articulated dump truck; Battery Rebuilders; Bus or Manhaul Driver; Concrete Buggies (power operated); Concrete pump truck; Dump Trucks, side, end and bottom dumps, including Semi Trucks and Trains or combinations there of: up to and including 10 cu. yds.; Lift Jitneys, Fork Lifts (all sizes in loading, unloading and transporting material on job site); Loader and/or Leverman on Concrete Dry Batch Plant (manually operated); Pilot Car; Pickup truck; Solo Flat Bed and misc. Body Trucks, 0-10 tons; Truck Tender; Truck Mechanic Tender; Water Wagons (rated capacity) up to 3,000 gallons; Transit Mix and Wet or Dry Mix - 5 cu. yds. and under; Lubrication Man, Fuel Truck Driver, Tireman, Wash Rack, Steam Cleaner or combinations; Team Driver; Slurry Truck Driver or Leverman; Tireman

GROUP 2: Boom truck/hydra lift or retracting crane; Challenger; Dumpsters or similar equipment all sizes; Dump Trucks/articulated dumps 6 cu to 10 cu.; Flaherty Spreader Driver or Leverman; Lowbed Equipment, Flat Bed Semi-trailer or doubles transporting equipment or wet or dry materials; Lumber Carrier, Driver-Straddle Carrier (used in loading, unloading and transporting of materials on job site); Oil Distributor Driver or Leverman; Transit mix and wet or dry mix trucks: over 5 cu. yds. and including 7 cu. yds.; Vacuum trucks; Water truck/Wagons (rated capacity) over 3,000 to 5,000 gallons

GROUP 3: Ammonia nitrate distributor driver; Dump trucks, side, end and bottom dumps, including Semi Trucks and Trains or combinations thereof: over 10 cu. yds. and including 30 cu. yds. includes Articulated dump trucks; Selfpropelled street sweeper; Transit mix and wet or dry mix truck: over 7 cu yds. and including 11 cu yds.; Truck Mechanic Welder Body Repairman; Utility and cleanup truck; Water Wagons (rated capacity) over 5,000 to 10,000 gallons

GROUP 4: Asphalt burner; Dump Trucks, side, end and bottom dumps, including Semi-Trucks and Trains or combinations thereof: over 30 cu. yds. and including 50 cu. yds. includes articulated dump trucks; Fire guard; Transit Mix and Wet or Dry Mix Trucks, over 11 cu. yds. and including 15 cu. yds.; Water Wagon (rated capacity) over 10,000 gallons to 15,000 gallons

GROUP 5: Dump Trucks, side, end and bottom dumps, including Semi Trucks and Trains or combinations thereof: over 50 cu. yds. and including 60 cu. yds. includes articulated dump trucks

GROUP 6: Bulk cement spreader w/o auger; Dry prebatch concrete mix trucks; Dump trucks, side, end and bottom dumps, including Semi Trucks and Trains of combinations thereof: over 60 cu. yds. and including 80 cu. yds., and includes articulated dump trucks; Skid truck

GROUP 7: Dump Trucks, side, end and bottom dumps, including Semi Trucks and Trains or combinations thereof: over 80 cu. yds. and including 100 cu. yds., includes articulated dump trucks; Industrial lift truck (mechanical tailgate)

TEAM0174A 06/01/2001

	Rates	Fringes
CLALLAM, GRAYS HARBOR, ISLAND, JEFFERSON, KING, KITSAP, LEWIS, MASON, PACIFIC (North of a straight line made by extending the north boundary line of Wahkiakum County west to the Pacific Ocean), PIERCE, SAN JUAN, SKAGIT, SNOHOMISH, THURSTON AND WHATCOM COUNTIES		

TRUCK DRIVERS;

GROUP 1:	24.94	9.12
GROUP 2:	24.36	9.12
GROUP 3:	22.08	9.12
GROUP 4:	18.00	9.12
GROUP 5:	24.70	9.12

TRUCK DRIVERS CLASSIFICATIONS

GROUP 1 - "A-frame or Hydralift" trucks and Boom trucks or similar equipment when "A" frame or "Hydralift" and Boom truck or similar equipment is used; Buggymobile; Bulk Cement Tanker; Dumpsters and similar equipment, Tournorockers, Tournowagon, Tournotrailer, Cat DW series, Terra Cobra, Le Tourneau, Westinghouse, Athye Wagon, Euclid Two and Four-Wheeled power tractor with trailer and similar top-loaded equipment transporting material: Dump Trucks, side, end and bottom dump, including semi-trucks and trains or combinations thereof with 16 yards to 30 yards capacity: Over 30 yards \$.15 per hour additional for each 10 yard increment; Explosive Truck (field mix) and similar equipment; Hyster Operators (handling bulk loose aggregates); Lowbed and Heavy Duty Trailer; Road Oil Distributor Driver; Spreader, Flaherty Transit mix used exclusively in heavy construction; Water Wagon and Tank Truck-3,000 gallons and over capacity

GROUP 2 - Bulllifts, or similar equipment used in loading or unloading trucks, transporting materials on job site; Dumpsters, and similar equipment, Tournorockers, Tournowagon, Turnotrailer, Cat. D.W. Series, Terra Cobra, Le Tourneau, Westinghouse, Athye wagon, Euclid two and four-wheeled power tractor with trailer and similar top-loaded equipment transporting material: Dump trucks, side, end and bottom dump, including semi-trucks and trains or combinations thereof with less than 16 yards capacity; Flatbed (Dual Rear Axle); Grease Truck, Fuel Truck, Greaser, Battery Service Man and/or Tire Service Man; Leverman and loader at bunkers and batch plants; Oil tank transport; Scissor truck; Slurry Truck; Sno-Go and similar equipment; Swampers; Straddler Carrier (Ross, Hyster) and similar equipment; Team Driver; Tractor (small, rubber-tired)(when used within Teamster

jurisdiction); Vacuum truck; Water Wagon and Tank trucks-less than 3,000 gallons capacity; Winch Truck; Wrecker, Tow truck and similar equipment

GROUP 3 - Flatbed (single rear axle); Pickup Sweeper; Pickup Truck. (Adjust Group 3 upward by \$2.00 per hour for onsite work only)

GROUP 4 - Escort or Pilot Car

GROUP 5 - Mechanic

HAZMAT PROJECTS

Anyone working on a HAZMAT job, where HAZMAT certification is required, shall be compensated as a premium, in addition to the classification working in as follows:

LEVEL C: +\$.25 per hour - This level uses an air purifying respirator or additional protective clothing.

LEVEL B: +\$.50 per hour - Uses same respirator protection as Level A. Supplied air line is provided in conjunction with a chemical "splash suit."

LEVEL A: +\$.75 per hour - This level utilizes a fully-encapsulated suit with a self-contained breathing apparatus or a supplied air line.

ZONE DIFFERENTIALS

Zone pay will be calculated from the city center of the following listed cities:

BELLINGHAM	CENTRALIA	RAYMOND	OLYMPIA
EVERETT	SHELTON	ANACORTES	BELLEVUE
SEATTLE	PORT ANGELES	MT. VERNON	KENT
TACOMA	PORT TOWNSEND	ABERDEEN	BREMERTON

TRAVEL - Zone A - 0 - 25 miles - Free Zone

Zone B - 25 - 45 miles - \$.70 per hour.

Zone C - Over 45 miles - \$1.00 per hour.

TEAM0760C 06/01/1999

	Rates	Fringes
ADAMS, ASOTIN, BENTON, CHELAN, COLUMBIA, DOUGLAS, FERRY, FRANKLIN, GARFIELD, GRANT KITTITAS, LINCOLN, OKANOGAN, PEND OREILLE, SPOKANE, STEVENS, WALLA WALLA, AND WHITMAN COUNTIES		
TRUCK DRIVERS		

(ANYONE WORKING ON HAZMAT JOBS SEE FOOTNOTE A BELOW)

ZONE 1: (INCLUDES ALL OF YAKIMA COUNTY)

GROUP 1	17.42	7.31
GROUP 2	19.69	7.31
GROUP 3	20.19	7.31
GROUP 4	20.52	7.31
GROUP 5	20.63	7.31
GROUP 6	20.80	7.31
GROUP 7	21.33	7.31
GROUP 8	21.66	7.31

Zone Differential (Add to Zone 1
rate: Zone 2 - \$2.00)

BASE POINTS: Spokane, Moses Lake, Pasco, Lewiston

Zone 1: 0-45 radius miles from the main post office.

Zone 2: 45 radius miles and over from the main post office

TRUCK DRIVERS CLASSIFICATIONS

GROUP 1: Escort Driver or Pilot Car; Employee Haul; Power Boat Hauling Employees or Material

GROUP 2: Fish Truck; Flat Bed Truck; Fork Lift (3000 lbs. and under); Leverperson (loading trucks at bunkers); Trailer Mounted

Hydro Seeder and Mulcher; Seeder & Mulcher; Stationary Fuel Operator; Tractor (small, rubber-tired, pulling trailer or similar equipment)

GROUP 3: Auto Crane (2000 lbs. capacity); Buggy Mobile & Similar; Bulk Cement Tanks & Spreader; Dumptor (6 yds. & under); Flat Bed Truck with Hydraulic System; Fork Lift (3001-16,000 lbs.); Fuel Truck Driver, Steamcleaner & Washer; Power Operated Sweeper; Rubber-tired Tunnel Jumbo; Scissors Truck; Slurry Truck Driver; Straddle Carrier (Ross, Hyster, & similar); Tireperson; Transit Mixers & Truck Hauling Concrete (3 yd. to & including 6 yds.); Trucks, side, end, bottom & articulated end dump (3 yards to and including 6 yds.); Warehouseperson (to include shipping & receiving); Wrecker & Tow Truck

GROUP 4: A-Frame; Burner, Cutter, & Welder; Service Greaser; Trucks, side, end, bottom & articulated end dump (over 6 yards to and including 12 yds.); Truck Mounted Hydro Seeder; Warehouseperson; Water Tank truck (0-8,000 gallons)

GROUP 5: Dumptor (over 6 yds.); Lowboy (50 tons & under); Self-loading Roll Off; Semi-Truck & Trailer; Tractor with Steer Trailer; Transit Mixers and Trucks Hauling Concrete (over 6 yds. to and including 10 yds.); Trucks, side, end, bottom and end dump (over 12 yds. to & including 20 yds.); Truck-Mounted Crane (with load bearing surface either mounted or pulled, up to 14 ton); Vacuum Truck (super sucker, guzzler, etc.)

GROUP 6: Flaherty Spreader Box Driver; Flowboys; Fork Lift (over 16,000 lbs.); Dumps (Semi-end); Mechanic (Field); Semi-end Dumps; Transfer Truck & Trailer; Transit Mixers & Trucks Hauling Concrete (over 10 yds. to & including 20 yds.); Trucks, side, end, bottom and articulated end dump (over 20 yds. to & including 40 yds.); Truck and Pup; Tournarocker, DW's & similar with 2 or more 4 wheel-power tractor with trailer, gallonage or yardage scale, whichever is greater Water Tank Truck (8,001-14,000 gallons)

GROUP 7: Oil Distributor Driver; Stringer Truck (cable operated trailer); Transit Mixers & Trucks Hauling Concrete (over 20 yds.); Truck, side, end, bottom end dump (over 40 yds. to & including 100 yds.); Truck Mounted Crane (with load bearing surface either mounted or pulled (16 through 25 tons);

GROUP 8: Prime Movers and Stinger Truck; Trucks, side, end, bottom and articulated end dump (over 100 yds.); Helicopter Pilot Hauling Employees or Materials

Footnote A - Anyone working on a HAZMAT job, where HAZMAT certification is required, shall be compensated as a premium, in addition to the classification working in as follows:

LEVEL C-D: - \$.50 PER HOUR (This is the lowest level of protection. This level may use an air purifying respirator or additional protective clothing.

LEVEL A-B: - \$1.00 PER HOUR (Uses supplied air in conjunction with a chemical splash suit or fully encapsulated suit with a self-contained breathing apparatus.

NOTE: Trucks Pulling Equipment Trailers: shall receive \$.15/hour over applicable truck rate

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.
=====

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(v)).

In the listing above, the "SU" designation means that rates listed under that identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

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General Decision Number OR010001

General Decision Number **OR010001**

Superseded General Decision No. OR000001

State: Oregon

Construction Type:

BUILDING

County(ies):

BAKER	JACKSON	POLK
BENTON	JEFFERSON	SHERMAN
CLACKAMAS	KLAMATH	TILLAMOOK
CLATSOP	LAKE	UMATILLA
COLUMBIA	LANE	UNION
CROOK	LINCOLN	WALLOWA
DESCHUTES	LINN	WASCO
GILLIAM	MALHEUR	WASHINGTON
GRANT	MARION	WHEELER
HARNEY	MORROW	YAMHILL
HOOD RIVER	MULTNOMAH	

BUILDING CONSTRUCTION PROJECTS (does not include residential construction consisting of single family homes and apartments up to and including 4 stories)

Modification Number	Publication Date
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0	03/02/2001
1	03/09/2001
2	03/16/2001
3	04/06/2001
4	04/20/2001
5	04/27/2001
6	05/04/2001
7	06/01/2001
8	06/15/2001
9	06/22/2001
10	07/06/2001
11	08/03/2001
12	10/05/2001
13	10/19/2001
14	11/02/2001
15	11/16/2001
16	12/14/2001
17	12/28/2001
18	01/04/2002

COUNTY(ies):

BAKER	JACKSON	POLK
BENTON	JEFFERSON	SHERMAN
CLACKAMAS	KLAMATH	TILLAMOOK
CLATSOP	LAKE	UMATILLA
COLUMBIA	LANE	UNION
CROOK	LINCOLN	WALLOWA
DESCHUTES	LINN	WASCO
GILLIAM	MALHEUR	WASHINGTON
GRANT	MARION	WHEELER
HARNEY	MORROW	YAMHILL
HOOD RIVER	MULTNOMAH	

ASBE0036A 04/28/2001

Rates

Fringes

ASBESTOS WORKERS/INSULATORS		
Projects under \$35,000		
(Includes application of all insulating materials, protective coverings, coatings and finishings to all of mechanical systems)	27.96	8.25
Projects \$35,000 and over		
(Includes application of all insulating materials, protective coverings, coatings and finishings to all of mechanical systems)	28.96	8.25

ASBE0036C 04/29/2000		
	Rates	Fringes
HAZARDOUS MATERIAL HANDLERS		
(Includes preparation, wetting, stripping, removal, scrapping, vacuuming, bagging and disposing of all insulation materials, whether they contain asbestos or not, from mechanical systems)		
	13.75	3.70

BOIL0500A 10/01/1999		
	Rates	Fringes
BOILERMAKERS	24.32	9.60

BROR0001A 06/01/2001		
	Rates	Fringes
BAKER, BENTON (NORTH), CLACKAMAS, CLATSOP, COLUMBIA, GILLIAM, HARNEY, HOOD RIVER, LINCOLN (NORTH), LINN (NORTH), MALHEUR (NORTH), MARION, MORROW, MULTNOMAH, POLK, SHERMAN, TILLAMOOK, UMATILLA, UNION, WALLOWA, WASCO (NORTH), WASHINGTON AND YAMHILL COUNTIES		
BRICKLAYERS	25.77	9.70
MARBLE AND STONE MASONS	26.77	9.70

BROR0001E 06/01/2000		
	Rates	Fringes
BENTON (SOUTH), CROOK, DESCHUTES, GRANT, JACKSON, JEFFERSON, KLAMATH, LAKE, LANE, LINCOLN (SOUTH), LINN (SOUTH), MALHEUR (SOUTH), WASCO (SOUTH) AND WHEELER COUNTIES		
BRICKLAYERS	24.41	7.04
MARBLE & STONE MASONS	25.41	7.04

BROR0001F 06/01/2001		
	Rates	Fringes
TILESETTER AND TERRAZZO FINISHERS	17.75	5.87
TILESETTER AND TERRAZZO WORKERS	23.50	6.98

CARP0001B 12/01/2001		
	Rates	Fringes
CARPENTERS		
ZONE 1:		
CARPENTERS	26.83	8.29
FLOOR LAYERS & FLOOR FINISHERS (the laying of all hardwood floors nailed and		

mastic set, parquet and wood-type
 tiles, and block floors, the
 sanding and finishing of floors,
 the preparation of old and new
 floors when the materials
 mentioned above are to be
 installed), INSULATORS (fiberglass
 and similar irritating material) 26.98 8.29
 MILLWRIGHTS 27.33 8.29
 PILEDRIVERS 27.93 8.29
 Zone Differential (Add to Zone 1 rates):
 Zone 2 - \$0.85
 Zone 3 - 1.25
 Zone 4 - 1.70
 Zone 5 - 2.00
 Zone 6 - 3.00
 Zone 1 - All jobs or projects located within 30 miles of the
 respective City Hall
 Zone 2 - More than 30 miles and less than 40 miles from the
 respective City Hall
 Zone 3 - More than 40 miles and less than 50 miles from the
 respective City Hall
 Zone 4 - More than 50 miles and less than 60 miles from the
 respective City Hall
 Zone 5 - More than 60 miles and less than 70 miles from the
 respective City Hall
 Zone 6 - More than 70 miles from the respective City Hall.
 BASEPOINTS CITIES FOR CARPENTERS (EXCLUDING MILLWRIGHTS,
 PILEDRIVERS AND DIVERS)
 ALBANY ASTORIA BAKER
 BEND BROOKINGS BURNS
 COOS BAY CORVALLIS EUGENE
 GOLDENDALE GRANTS PASS HERMISTON
 HOOD RIVER KLAMATH FALLS LAGRANDE
 LAKEVIEW LONGVIEW MADRAS
 MEDFORD McMINNVILLE NEWPORT
 OEGON CITY ONTARIO PENDLETON
 PORTLAND PORT ORFORD REEDSPORT
 ROSEBURG SALEM ST. HELENS
 THE DALLES TILLAMOOK VANCOUVER
 BASEPOINTS FOR MILLWRIGHTS
 EUGENE NORTH BEND
 LONGVIEW PORTLAND
 MEDFORD THE DALLES
 VANCOUVER
 BASEPOINTS FOR PILEDRIVERS AND DIVERS
 ASTORIA BEND
 COOS BAY EUGENE
 KLAMATH FALLS LONGVIEW
 MEDFORD NEWPORT
 PORTLAND ROSEBURG
 SALEM THE DALLES

 CARP9001C 12/01/2000

	Rates	Fringes
ACOUSTICAL INSTALLER & DRYWALL HANGER	25.56	7.70

LATHER	24.84	9.42

ELEC0048A 07/01/2001		
	Rates	Fringes
CLACKAMAS, CLATSOP, COLUMBIA, HOOD RIVER, MULTNOMAH, SHERMAN, TILLAMOOK, WASCO, WASHINGTON AND YAMHILL (NORTH) COUNTIES		
ELECTRICIANS	30.20	3%+10.25
CABLE SPLICERS	30.45	3%+10.25

ELEC0048I 07/01/2001		
	Rates	Fringes
CLACKAMAS, CLATSOP, COLUMBIA, HOOD RIVER, MULTNOMAH, SHERMAN, TILLAMOOK, WASCO, WASHINGTON AND YAMHILL (NORTH) COUNTIES		
COMMUNICATIONS AND SYSTEMS		
TECHNICIAN	23.25	7.90
SCOPE OF WORK FOR TECHNICIAN		
Includes the installation testing, service and maintenance, of the following systems which utilize the transmission and/or transference of voice, sound vision and digital for commercial, education, security and entertainment purposes for the following: TV monitoring and surveillance, background-foreground music, intercom and telephone interconnect, inventory control systems, microwave transmission, multi-media, multiplex, nurse call system, radio page, school intercom and sound, burglar alarms, and low voltage master clock systems.		
WORK EXCLUDED		
Raceway systems are not covered (excluding Ladder-Rack for the purpose of the above listed systems). Chases and/or nipples (not to exceed 10 feet) may be installed on open wiring systems.		
Energy management systems.		
SCADA (Supervisory Control and Data Acquisition) when not intrinsic to the above listed systems (in the scope)		
Fire alarm systems when installed in raceways (including wire and cable pulling) shall be performed at the electrician wage rate, when either of the following two (2) conditions apply:		
1. The project involves new or major remodel building trades construction.		
2. The conductors for the fire alarm system are installed in conduit.		

ELEC0112A 12/01/2000		
	Rates	Fringes
BAKER, GILLIAM, GRANT, MORROW, UMATILLA, UNION, WALLOWA, AND WHEELER COUNTIES		
ELECTRICIANS	27.75	3%+6.93
CABLE SPLICERS	29.14	3%+6.93

ELEC0112K 06/01/2000		
	Rates	Fringes
BAKER, GILLIAM, GRANT, MORROW, UMATILLA, UNION, WALLOWA AND WHEELER COUNTIES		
COMMUNICATIONS & SYSTEMS		
TECHNICIAN	19.00	4.80
SCOPE OF WORK		
Includes the installation testing, service and maintenance, of the following systems which utilize the transmission and/or transference of voice, sound, vision and digital for commercial,		

education, security and entertainment purposes for the following:
 TV monitoring and surveillance, background-foreground music,
 intercom and telephone interconnect, inventory control systems,
 microwave transmission, multi-media, multiplex, nurse call
 systems, radio page, school intercom and sound, burglar alarms,
 and low voltage master clock systems.

WORK EXCLUDED

Raceway systems are not covered (excluding Ladder-Rack for the
 purpose of the above listed systems). Chases and/or nipples (not
 to exceed 10 feet) may be installed on open wiring systems.

Energy management systems.

SCADA (Supervisory Control and Data Acquisition) when not
 intrinsic to the above listed systems (in the scope).

Fire alarm systems when installed in raceways (including wire and
 cable pulling) shall be performed at the electrician wage rate,
 when either of the following two (2) conditions apply:

1. The project involves new or major remodel building
 trades construction.
2. The conductors for the fire alarm system are installed
 in conduit.

 ELEC0280A 01/01/2001

	Rates	Fringes
BENTON, CROOK, DESCHUTES, JEFFERSON, LANE (EAST OF A LINE RUNNING NORTH AND SOUTH FROM THE NORTHEAST CORNER OF LINCOLN COUNTY), LINN, MARION, POLK, AND YAMHILL (SOUTHERN HALF) COUNTIES		
ELECTRICIANS	29.00	3%+8.20
CABLE SPLICERS	31.90	3%+8.20

ELEC0280B 07/01/2000

	Rates	Fringes
BENTON, CROOK, DESCHUTES, JEFFERSON, LANE (EAST OF A LINE RUNNING NORTH AND SOUTH FROM THE NORTHEAST CORNER OF LINCOLN COUNTY), LINN, MARION, POLK AND YAMHILL (SOUTHERN HALF) COUNTIES		
COMMUNICATIONS AND SYSTEMS TECHNICIAN	19.51	5.09

SCOPE OF WORK

Includes the installation testing, service and maintenance, of
 the following systems which utilize the transmission and/or
 transference of voice, sound vision and digital for commercial,
 education, security and entertainment purposes for the TV
 monitoring and surveillance, background-foreground music,
 intercom and telephone interconnect, inventory control systems,
 microwave transmission, multi-media, multiplex, nurse call
 systems, radio page, school intercom and sound, burglar alarms,
 and low voltage master clock systems.

A. COMMUNICATIONS SYSTEMS THAT TRANSMIT OR RECEIVE INFORMATION
 AND/OR CONTROL SYSTEMS THAT ARE INTRINSIC TO THE ABOVE
 LISTED SYSTEMS

SCADA (Supervisory Control and Data Acquisition)

PCM (Pulse Code Modulation)

Inventory Control Systems

Digital Data Systems

Broadband and Baseband and Carriers

Post of Sale Systems

VSAT Data Systems

Data Communication Systems

RF and Remote Control Systems
 Fiber Optic Data Systems
 B. SOUND AND VOICE TRANSMISSION/TRANSFERENCE SYSTEMS
 Background foreground musicc
 Intercom and telephone interconnect systems
 Telephone systems
 Nurse call systems
 Radio page systems
 School intercom and sound systems
 Burglar alarm systems
 Low voltage master clock systems
 Multi media/multiplex systems
 Sound and musical entertainment systems
 RF systems
 Antennas and Wave Guide
 C. FIRE ALARM SYSTEMS
 Installation, wire pulling and testing
 D. TELEVISION AND VIDEO SYSTEMS
 Television monitoring and surveillance systems
 Video security systems
 Video entertainment systems
 Video educational systems
 Microwave transmission systems
 CATV and CCTV
 E. SECURITY SYSTEMS
 Perimeter security systems
 Vibration sensor systems
 Card access systems
 Access Control systems
 Sonar/Infrared monitoring equipment

ELEC0291A 06/01/2000		
	Rates	Fringes
MALHEUR COUNTY		
ELECTRICIANS	22.26	4.40%+5.82
CABLE SPLICERS	24.49	4.40%+5.82

* ELEC0659A 01/01/2002		
	Rates	Fringes
DOUGLAS (EAST OF A LINE RUNNING NORTH AND SOUTH FROM THE NE CORNER OF COOS COUNTY TO THE SE CORNER OF LINCOLN COUNTY), HARNEY, JACKSON, JOSEPHINE, KLAMATH AND LAKE COUNTIES		
ELECTRICIANS	27.03	9.31
CABLE SPLICERS	27.03	9.31

ELEC0659E 07/01/2000		
	Rates	Fringes
HARNEY, JACKSON, KLAMATH AND LAKE COUNTIES COMMUNICATIONS AND SYSTEMS		
TECHNICIAN	19.51	5.09

SCOPE OF WORK

Includes the installation testing, service and maintenance, of the following systems which utilize the transmission and/or transference of voice, sound vision and digital for commercial, education, security and entertainment purposes for the following: TV monitoring and surveillance, background-foreground music, intercom and telephone interconnect, inventory control systems,

microwave transmission, multi-media, multiplex, nurse call systems, radio page, school intercom and sound, burglar alarms, and low voltage master clock systems.

A. COMMUNICATIONS SYSTEMS THAT TRANSMIT OR RECEIVE INFORMATION AND/OR CONTROL SYSTEMS THAT ARE INTRINSIC TO THE ABOVE LISTED SYSTEMS

SCADA (Supervisory Control and Data Acquisition)

PCM (Pulse Code Modulation)

Inventory Control Systems

Digital Data Systems

Broadband and Baseband and Carriers

Post of Sale Systems

VSAT Data Systems

Data Communication Systems

RF and Remote Control Systems

Fiber Optic Data Systems

Intercom and telephone interconnect systems

B. SOUND AND VOICE TRANSMISSION/TRANSFERENCE SYSTEMS

Background foreground music

Intercom and telephone interconnect systems

Telephone systems

Nurse call systems

Radio page systems

School intercom and sound systems

Burglar alarm systems

Low voltage master clock systems

Multi media/multiplex systems

Sound and musical entertainment systems

RF systems

Antennas and Wave Guide

C. FIRE ALARM SYSTEMS

Installation, wire pulling and testing

D. TELEVISION AND VIDEO SYSTEMS

Television monitoring and surveillance systems

Video security systems

Video entertainment systems

Video educational systems

Microwave transmission systems

CATV and CCTV

E. SECURITY SYSTEMS

Perimeter security systems

Vibration sensor systems

Card access systems

Access control systems

Sonar/infrared monitoring equipment

ELEC0932A 07/01/2001

	Rates	Fringes
COOS, CURRY, LINCOLN, DOUGLAS AND LANE COUNTIES (AREA LYING WEST OF A LINE NORTH AND SOUTH FROM THE N.E. CORNER OF COOS COUNTY TO THE S.E. CORNER OF LINCOLN COUNTY)		
ELECTRICIANS	26.75	3%+8.60

ELEC0932C 07/01/2000

	Rates	Fringes
LANE (AREA LYING WEST OF A LINE NORTH AND SOUTH FROM THE N.E. CORNER OF COOS COUNTY TO THE S.E. CORNER OF LINCOLN COUNTY) AND		

LINCOLN COUNTIES
COMMUNICATIONS AND SYSTEMS
TECHNICIAN

19.51

5.09

SCOPE OF WORK

Includes the installation testing, service and maintenance, of the following systems which utilize the transmission and/or transference of voice, sound vision and digital for commercial, education, security and entertainment purposes for the following: TV monitoring and surveillance, background-foreground music, intercom and telephone interconnect, inventory control systems, microwave transmission, multi-media, multiplex, nurse call systems, radio page, school intercom and sound, burglar alarms, and low voltage master clock systems.

A. COMMUNICATIONS SYSTEMS THAT TRANSMIT OR RECEIVE INFORMATION AND/OR CONTROL SYSTEMS THAT ARE INTRINSIC TO THE ABOVE LISTED SYSTEMS

SCADA (Supervisory Control and Data Acquisition)
PCM (Pulse Code Modulation)
Inventory Control Systems
Digital Data Systems
Broadband and Baseband and Carriers
Post of Sale Systems
VSAT Data Systems
Data Communication Systems
RF and Remote Control Systems
Fiber Optic Data Systems

B. SOUND AND VOICE TRANSMISSION/TRANSFERENCE SYSTEMS

Background foreground music
Intercom and telephone interconnect systems
Telephone systems
Nurse call systems
Radio page systems
School intercom and sound systems
Burglar alarm systems
Low voltage master clock systems
Multi media/multiplex systems
Sound and musical entertainment systems
RF systems
Antennas and Wave Guide

C. FIRE ALARM SYSTEMS

Installation, wire pulling and testing

D. TELEVISION AND VIDEO SYSTEMS

Television monitoring and surveillance systems
Video security systems
Video entertainment systems
Video educational systems
Microwave transmission systems
CATV and CCTV

E. SECURITY SYSTEMS

Perimeter security systems
Vibration sensor systems
Card access systems
Access control systems
Sonar/infrared monitoring equipment

ELEV0019D 10/01/2001

Rates

Fringes

BAKER, UNION, UMATILLA AND WALLOWA COUNTIES

ELEVATOR MECHANICS 24.92 7.455+a

FOOTNOTE a: Vacation Pay: 8% with 5 or more years of service, 6% for 6 months to 5 years service. Paid Holidays: New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Friday after, and Christmas Day.

ELEV0023A 04/01/2001

Rates Fringes
ALL COVERED COUNTIES (EXCLUDING BAKER, UMATILLA, UNION AND WALLOWA COUNTIES)

ELEVATOR MECHANIC 31.845 7.195+a

FOOTNOTE a: Vacation Pay: 8% with 5 or more years of service, 6% for 6 months to 5 years service. Paid Holidays: Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Friday after, and Christmas Day, and New Years Day.

* ENGI0701B 01/01/2002

Rates Fringes
SEE ZONE DESCRIPTIONS AND BASEPOINTS

POWER EQUIPMENT OPERATORS (See Footnote C):

ZONE 1:

GROUP 1	28.55	8.95
GROUP 1A	29.98	8.95
GROUP 1B	31.41	8.95
GROUP 2	27.34	8.95
GROUP 3	27.60	8.95
GROUP 4	26.09	8.95
GROUP 5	25.50	8.95
GROUP 6	23.20	8.95

Zone Differential (add to Zone 1 rates):

Zone 2 - \$1.50

Zone 3 - 3.00

For the following metropolitan counties: MULTNOMAH; CLACKAMAS; MARION; WASHINGTON; YAMHILL; AND COLUMBIA; CLARK; AND COWLITZ COUNTY, WASHINGTON WITH MODIFICATIONS AS INDICATED:

All jobs or projects located in Multnomah, Clackamas and Marion Counties, West of the western boundary of Mt. Hood National Forest and West of Mile Post 30 on Interstate 84 and West of Mile Post 30 on State Highway 26 and West of Mile Post 30 on Highway 22 and all jobs or projects located in Yamhill County, Washington County and Columbia County and all jobs or projects located in Clark & Cowlitz County, Washington except that portion of Cowlitz County in the Mt. St. Helens "Blast Zone" shall receive Zone I pay for all classifications.

All jobs or projects located in the area outside the identified boundary above, but less than 50 miles from the Portland City Hall shall receive Zone II pay for all classifications.

All jobs or projects located more than 50 miles from the Portland City Hall, but outside the identified border above, shall receive Zone III pay for all classifications.

For the following cities: ALBANY; BEND; COOS BAY; EUGENE; GRANTS PASS; KLAMATH FALLS; MEDFORD; ROSEBURG

All jobs or projects located within 30 miles of the respective city hall of the above mentioned cities shall receive Zone I pay for all classifications.

All jobs or projects located more than 30 miles and less than 50

miles from the respective city hall of the above mentioned cities shall receive Zone II pay for all classifications. All jobs or projects located more than 50 miles from the respective city hall of the above mentioned cities shall receive Zone III pay for all classifications.

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: CONCRETE: Batch Plant and/or Wet Mix Operator, three units or more; CRANE: Helicopter Operator, when used in erecting work; Whirley Operator, 90 ton and over; LATTICE BOOM CRANE: Operator 200 tons through 299 tons, and/or over 200 feet boom; HYDRAULIC CRANE: Hydraulic Crane Operator 90 tons through 199 tons with luffing or tower attachments; FLOATING EQUIPMENT: Floating Crane, 150 ton but less than 250 ton

GROUP 1A: CRANE: Hydraulic Operator, 200 tons and over (with luffing or tower attachment); LATTICE BOOM CRANE: Operator, 200 tons through 299 tons, with over 200 feet boom; FLOATING EQUIPMENT: Floating Crane 250 ton and over

GROUP 1B: LATTICE BOOM CRANE: Operator, 300 tons through 399 tons with over 200 feet boom; Operator 400 tons and over; FLOATING EQUIPMENT: Floating Crane 350 ton and over

GROUP 2: ASPHALT: Asphalt Plant Operator (any type); Roto Mill, pavement profiler, operator, 6 foot lateral cut and over; BLADE: Auto Grader or "Trimmer" (Grade Checker required); Blade Operator, Robotic; BULLDOZERS: Bulldozer operator over 120,000 lbs and above; Bulldozer operator, twin engine; Bulldozer Operator, tandem, quadnine, D10, D11, and similar type); Bulldozere Robotic Equipment (any type; CONCRETE: Batch Plant and/or Wet Mix Operator, one and two drum; Automatic Concrete Slip Form Paver Operator; Concrete Canal Line Operator; Concrete Profiler, Diamond Head; CRANE: Cableway Operator, 25 tons and over; HYDRAULIC CRANE: Hydraulic crane Operator 50 tons through 89 tons (with luffing or tower attachment); hydraulic crane operator 90 tons through 199 tons (with luffing or tower attachment); TOWER/WHIRLEY OPERATOR: Tower Crane Operator; Whirley Operator, under 90 tons; LATTICE BOOM CRANE: 90 through 199 tons and/or 150 to 200 feet boom; CRUSHER: Crusher Plant Operator; FLOATING EQUIPMENT: Floating Clamshell, etc.operator, 3 cu. yds. and over; Floating Crane (derrick barge) Operator, 30 tons but less than 150 tons; LOADERS: Loader Operator, 6 cu. yds. but less than 12 cu. yds.; Loader Operator, 12 cu. yds. and over; Loader 120,000 lbs. and above; REMOTE CONTROL: Remote controlled earth-moving equipment (no one operator shall operate more than two pieces of earth-moving equipment at one time); RUBBER-TIRED SCRAPERS: Rubber-tired Scraper Operator, with tandem scrapers, multi-engine; SHOVEL, DRAGLINE, CLAMSHELL, BACKHOE, SKOOPER OPERATOR: Shovel, etc., 3 cu. yds., but less than 5 cu. yds.; Shovel, etc., 5 cu. yds. and over; TRENCH MACHINE: Wheel Excavator, under 750 cu. yds. per hour (Grade Oiler required); Canal Trimmer (Grade Oiler required); Wheel Excavator, over 750 cu. yds. per hour (two Operators and at least one Grade Oiler required); Band Wagon (in conjunction with wheel excavator); UNDERWATER EQUIPMENT: Underwater Equipment Operator, remote or otherwise; HYDRAULIC HOES EXCAVATOR: Excavator over 130,000 lbs.

GROUP 3: LATTICE BOOM CRANES: Lattice Boom Crane-50 through 89 tons (and less than 150 feet boom); FORKLIFT: Rock Hound Operator; HYDRAULIC HOES EXCAVATOR: excavator over 80,000 lbs.

through 130,000 lbs.; LOADERS: Loader operator 60,000 and less than 120,000; RUBBER-TIRED SCRAPERS: Scraper Operator, with tandem scrapers; SHOVEL, DRAGLINE, CLAMSHELL, SKOOPER OPERATOR: Shovel, Dragline, Clamshell operators 3 cu. yds. but less than 5 cu yds.; Self Loading, paddle wheel, auger type, finish and/or 2 or more units; BULLDOZERS: Bulldozer operator over 70,000 lbs. up to and including 120,000

GROUP 4: ASPHALT: Blade Operator; Blade Operator, finish; Screed Operator; Asphalt Paver Operator (Screed man required); Diesel-Electric engineer, Plant; Roto-Mill, pavement profiler, operator, under six foot lateral cut; BLADE: Blade Operator, externally controlled by electronic, mechanical hydraulic means; Blade operator, multi-engine; BULLDOZERS: Bulldozer Operator over 20,000 lbs and more than 100 horse up to 70,000 lbs; Drill Cat Operator; Side-boom Operator; Cable-Plow Operator (any type); CLEARING: Log Skidders; Chippers; Incinerator; Stump Splitter (loader mounted or similar type); Stump Grinder (loader mounted or similar type); Tub Grinder; Land Clearing Machine (Track mounted forestry mowing & Grinding machine); Hydro Axe (loader mounted or similar type); COMPACTORS SELF PROPELLED: Compactor Operator, with blade; Compactor Operator, multi-engine; Compactor Operator, robotic; CONCRETE: Mixer Mobile Operator; Screed Operator; Concrete Cooling Machine Operator; Concrete Paving Road Mixer; Concrete Breaker; Reinforced Tank Banding Machine (K-17 or similar types); Laser Screed; CRANE: Chicago boom and similar types; Lift Slab Machine Operator; Boom type lifting device, 5 ton capacity or less; Hoist Operator, two (2) drum; Hoist Operator, three (3) or more drums; Derrick Operator, under 100 ton; Hoist Operator, stiff leg, guy derrick or similar type, 50 ton and over; Cableway Operator up to twenty (25) ton; Bridge Crane Operator, Locomotive, Gantry, Overhead; Cherry Picker or similar type crane hoist five (5) ton capacity or less; Hydraulic Crane Operator, under 50 tons; LATTICE BOOM CRANE OPERATOR: Lattice Boom Crane Operator, under 50 tons; CRUSHER: Generator Operator; Diesel-Electric Engineer; Grizzly Operator; DRILLING: Drill Doctor; Boring Machine Operator; Driller-Percussion, Diamond, Core, Cable, Rotary and similar type; Cat Drill (John Henry); Directional Drill Operator over 20,000 lbs pullback; FLOATING EQUIPMENT: Diesel-electric Engineer; Jack Operator, elevating barges, Barge Operator, self-unloading; Piledriver Operator (not crane type) (Deckhand required); Floating Clamshell, etc. Operator, under 3 cu. yds. (Fireman or Diesel-Electric Engineer required); Floating Crane (derrick barge) Operator, less than 30 tons; GENERATORS: Generator Operator; Diesel-electric Engineer; GUARDRAIL EQUIPMENT: Guardrail Punch Operator (all types); Guardrail Auger Operator (all types); Combination Guardrail machines, i.e., punch auger, etc.; HEATING PLANT: Surface Heater and Planer Operator; HYDRAULIC HOES EXCAVATOR: Robotic Hydraulic backhoe operator, track and wheel type to yp to including 20,000 lbs. with any or all attachments; Excavator Operator over 20,000 lbs through 80,000 lbs.; LOADERS: Belt Loaders, Kolman and Ko Cal types; Loaders Operator, front end and overhead, 25,000 lbs and less than 60,000 lbs; Elevating Grader Operator by Tractor operator, Sierra, Euclid or similar types; PILEDRIERS: Hammer Operator; Piledriver Operator (not crane type); PIPELINE, SEWER WATER: Pipe Cleaning Machine Operator; Pipe Doping Machine

Operator; Pipe Bending Machine Operator; Pipe Wrapping Machine Operator; Boring Machine Operator; Back Filling Machine Operator; REMOTE CONTROL: Concrete Cleaning Decontamination Machine Operator; Ultra High Pressure Water Jet Cutting Tool System Operator/Mechanic; Vacuum Blasting Machine Operator/mechanic; REPAIRMEN, HEAVY DUTY: Diesel Electric Engineer (Plant or Flating Floating; Bolt Threading Machine operator; Drill Doctor (Bit Grinder); H.D. Mechanic; H.D. Welder; Machine Tool Operator; Combination H.D. Mechanic-Welder, when dispatched and/or when required to do both; Welder-Certified, when dispatched and/or required; RUBBER-TIRED SCRAPERS: Rubber-tired Scraper Operator, single engine, single scraper; Self-loading, paddle wheel, auger type under 15 cu. yds.; Rubber-tired Scraper Operator, twin engine; Rubber-tired Scraper Operator, with push-pull attachments; Self Loading, paddle wheel, auger type 15 cu. yds. and over, single engine; Water pulls, water wagons; SHOVEL, DRAGLINE, CLAMSHELL, BACKHOE, SKOOPER OPERATOR: Diesel Electric Engineer; Stationary Drag Scraper Operator; Shovel, Dragline, Clamshell, Operator under 3 cu yds.; Grade-all Operator; Shovel, Dragline, Clamshell, Operator 3 cu yds, but less than 5 cu yds. GROUP 5: ASPHALT: Extrusion Machine Operator; Roller Operator (any asphalt mix); Asphalt Burner and Reconditioner Operator (any type), 84; Roto-Mill, pavement profiler, ground man BULLDOZERS: Bulldozer operator, 20,000 lbs. or less or 100 horse or less; COMPRESSORS: Compressor Operator any power), over 1,250 cu. ft. total capacity; COMPACTORS: Compactor Operator, including vibratory; Wagner Pactor Operator or similar type (without blade); CONCRETE: Combination mixer and Compressor Operator, gunite work; Concrete Batch Plant Quality Control Operator; Belcrete Operator; Pumpcrete Operator (any type); Pavement Grinder and/or Grooving Machine Operator (riding type); Cement Pump Operator, Fuller-Kenyon and similar; Concrete Pump Operator; Grouting Machine Operator; Concrete mixer operator, single drum, under five (5) bag capacity; Concrete Mixer Operator, single drum, under 5 bag capacity and over; Cast place pipe laying machine; Maginnis Internal Full Slab Vibrator Operator; Concrete Finishing machine Operator, Clary, Johnson, Bidwell, Burgess bridge deck or similar type; Curb Machine Operator, mechanical Berm, Curb and/or Curb and Gutter; Concrete Joint Machine Operator; Concrete Planer Operator; Tower Mobile Operator; Power Jumbo Operator setting slip forms; Slip Form Pumps, power driven hydraulic lighting device for concrete forms; Concrete Paving Machine Operator; Concrete Finishing Machine Operator; Concrete Spreader Operator; CRANE: Helicopter Hoist Operator; Hoist Operator, single drum; Elevator Operator; A-frame Truck Operator, Double drum; Boom Truck Operator; HYDRAULIC CRANE OPERATOR: Hydraulic Boom Truck, Pittman; DRILLING: Churm Drill and Earth Boring Machine Operator; Directional Drill Operator over 20,000 lbs pullback; FLOATING EQUIPMENT: Fireman; FORKLIFT: Lull Hi-Lift Operator or similar type; Fork Lift, over 5 ton and/or robotic; HYDRAULIC HOES EXCAVATORS: Hydraulic Backhoe Operator, wheel type (Ford, John Deere, Case type); Hydraulic Backhoe Operator track type up to and including WHEEL 20,000 lbs.; LOADERS: Loaders, rubber-tired type, less than 25,000 lbs; Elevating Grader Operator, Tractor Towed requiring Operator or Grader; OILERS: Service Oiler (Greaser); PIPELINE, SEWER WATER: Hydraulic Pipe Press Operator; Hydra Hammer or

similar types; Pavement Breaker Operator; PUMPS: Pump Operator, more than 5 (any size); Pot Rammer Operator; RAILROAD EQUIPMENT: Locomotive Operator, under 40 tons; Ballast Regulator Operator; Ballast Tamper Multi-Purpose Operator; Track Liner Operator; Tie Spacer Operator; Shuttle Car Operator; Locomotive Operator, 40 tons and over; SWEEPER: Sweeper operator (Wayne type) self propelled, construction job site

GROUP 6: ASPHALT: Plant Oiler; Plant Fireman; Pugmill Operator (any type); Truck mounted asphalt spreader, with screed; COMPRESSORS: Compressor Operator (any power), under 1,250 cu. ft. total capacity; CONCRETE: Plant Oiler, Assistant Conveyor Operator; Conveyor Operator; Mixer Box Operator (C.T.B., dry batch, etc.); Cement Hog Operator; Concrete Saw Operator; Concrete Curing Machine Operator (riding type); Wire Mat or Brooming Machine Operator; CRANE: Oiler; Fireman, all equipment; Truck Crane Oiler Driver; A-frame Truck Operator, single drum; Tugger or Coffin Type Hoist Operator; CRUSHER: Crusher Oiler; Crusher Feeder; DRILLING: Drill Tender; Auger Oiler; FLOATING EQUIPMENT: Deckhand; Boatman; FORKLIFT: Self-propelled Scaffolding Operator, construction job site (excluding working platform); Fork Lift or Lumber Stacker Operator, construction job site; Ross Carrier Operator, construction job site; GUARDRAIL EQUIPMENT: Oiler; Auger Oiler; Oiler, combination guardrail machines; Guardrail Punch Oiler; HEATING PLANT: Temporary Heating Plant Operator; LOADERS: Bobcat, skid steer (less than 1 cu yd.); Bucket Elevator Loader Operator, BarberGreene and similar types; OILERS: Oiler; Guardrail Punch Oiler; Truck Crane Oiler-Driver; Auger Oiler; Grade Oiler, required to check grade; Grade Checker; PIPELINE SEWER WATER: Tar Pot Fireman; Tar Pot Fireman (power agitated); PUMPS: Pump Operator (any power); Hydrostatic Pump Operator; RAILROAD EQUIPMENT: Brakeman; Oiler; Switchman; Motorman; Ballast Jack Tamper Operator; SHOVEL, DRAGLINE, CLAMSHELL, SKOOPER, ETC. OPERATOR: Oiler, Grade Oiler (required to check grade); Grade Checker; Fireman; SWEEPER: Broom operator, self propelled, construction job site

IRON0029K 07/01/2001		
	Rates	Fringes
IRONWORKERS	25.82	11.35

LAB00001M 06/01/2001		
	Rates	Fringes
MASON TENDERS/HOD CARRIER:		
Tenders to Bricklayers, Tile		
Setters, Marble Setters and		
Terrazzo Workers, Topping for		
Cement Finishers and Mortar		
Mixers	23.29	7.10

LAB00003A 06/01/2001		
	Rates	Fringes
ZONE 1:		
LABORERS (SEE FOOTNOTE C):		
GROUP 1	20.85	8.20
GROUP 2	21.35	8.20
GROUP 3	21.73	8.20
GROUP 4	22.05	8.20

GROUP 5 18.33 8.20

Zone Differential (Add to Zone 1 rates):

Zone 2 - \$0.65

Zone 3 - 1.15

Zone 4 - 1.70

Zone 5 - 2.75

BASE POINT CITIES:

ALBANY	ASTORIA	BAKER CITY
BEND	BURNS	COOS BAY
EUGENE	GRANTS PASS	HERMISTON
KLAMATH FALLS	MEDFORD	PENDLETON
PORTLAND	ROSEBURG	SALEM
THE DALLES		

Zone 1 - All jobs or projects located with 30 miles of the respective City Hall

Zone 2 - More than 30 miles and less than 40 miles from the respective City Hall

Zone 3 - More than 40 miles and less than 50 miles from the respective City Hall

Zone 4 - More than 50 miles and less than 80 miles from the respective City Hall

Zone 5 - More than 80 miles from the respective City Hall.

LABORER CLASSIFICATIONS

GROUP 1: Asphalt Spreaders; Asphalt Plant Laborers; Batch Weighman; Broomers; Brush Burners and Cutters; Car and Truck Loaders; Carpenter Tender; Change-House Man or Dry Shack Man; Choker Setter; Cleanup Laborers; Curing, Concrete; Demolition, Wrecking, and Moving Laborers; Dumpers, road oiling crew; Dumpmen (for grading crew); Elevator Feeders; Fine Graders; Fence Builders; Form Strippers (not swinging stages); Guard Rail, Median Rail, Guide Post, Reference Post, Right-of-way Marker; Hazardous Waste Laborers; Landscaping or Planting Laborer; Leverman or Aggregate Spreader (Flaherty and similar types); Loading Spotters; Material Yard Man (including electrical); Pittsburgh Chipper Operator or similar types; Railroad Track Laborers; Ribbon Setters (including steel forms); Rip Rap Man (hand placed); Road Pump Tender; Sewer Labor; Signalman; Skipman; Slopers; Spraymen; Stake Chaser; Stockpiler; Tie Back Shoring; Timber Faller and Bucker (hand labor); Toolroom Man (at jobsite); Weight-Man-Crusher (aggregate when used)

GROUP 2: Applicator (including Pot Tender for same), applying protective material by hand or nozzle on utility lines or storage tanks on project; Brush Cutters (power saw); Burners; Choker Splicer; Clary Power Spreader and similar types; Clean-up Nozzleman-Green-Cutter (concrete, rock, etc.); Concrete Laborers; Concrete Power Buggyman; Crusher Feeder; Demolition and Wrecking Charred Materials; Dropping and Wrapping Pipe; Guniting Nozzleman Tender; Guniting or Sand Blasting Pot Tender; Handlers or Mixers of all materials of an irritating nature (including cement and lime); Post Hole Diggers (air, gas or electric); Sand Blasting (wet); Stake-Setter; Tampers; Tool Operators (includes but not limited to: Dry Pack Machine, Jackhammer, Chipping Guns, Paving Breakers)

GROUP 3: Asbestos removal (structural removal only); Bit Grinder; Concrete Saw Operator; Drill Doctor; Drill Operators (Air Tracks, Cat Drills, Wagon Drills, Rubber-mounted Drills, and other similar types, including at crusher plants); Manhole

Builder; Nippers, and Timbermen; Power Saw Operators-Bucking and Falling; Sand Blasting (dry); Sewer Timberman; Track Liners, Anchor Machines, Ballast Regulators, Multiple Tampers, Power Jacks; Vibrators; Vibrating Screed; Water Blaster

GROUP 4: Asphalt Rakers; Grade Checker; Concrete Nozzlemans; Gunite Nozzlemans; High Scalers, Strippers and Drillers (covers work in swinging stages, chairs or belts, under extreme conditions unusual to normal drilling, blasting, barring-down, or sloping and stripping-down or sloping and stripping); Pipelayers (all types); Powdermen; Pumpcrete Nozzlemen; Loop Installation; TUNNELS: Miner; Powderman; Motorman-Dinky Locomotive; Shield Operator; Tunnel Bullganag (above ground); Tunnel-Chuck Tenders; Tunnel-Muckers, brakemen, concrete crew, bull gang (underground)

GROUP 5: Traffic Flaggers

LAB00003D 06/01/2001		
	Rates	Fringes
PLASTERER HOD CARRIER	22.04	7.10

PAIN0005N 10/01/2001		
	Rates	Fringes
MALHEUR COUNTY GLAZIERS	17.67	6.53

PAIN00540 06/01/1999		
	Rates	Fringes
MORROW, UMATILLA AND WALLOWA COUNTIES DRYWALL FINISHERS	19.98	4.25

PAIN0055A 11/01/1999		
	Rates	Fringes
CLACKAMAS, COLUMBIA, HOOD RIVER, MULTNOMAH, MORROW, UMATILLA, WALLOWA, WASCO AND WASHINTON COUNTIES PAINTERS:		
Brush & Roller	17.10	3.48
Spray, Sandblasting	17.70	3.48
High work - All work 60 feet or higher	17.60	3.48
BAKER, BENTON, CLATSOP, CROOK, DESCHUTES, GRANT, GILLIAM, HARNEY, JEFFERSON, LAKE, LANE, LINN, LINCOLN, MALHEUR, MARION, POLK, TILLAMOOK, SHERMAN, UNION, WHEELER AND YAMHILL COUNTIES PAINTERS:		
Brush & Roller	15.98	3.48
Spray, Sandblasting	16.58	3.48
High work - All work 60 feet or higher	16.48	3.25
JACKSON AND KLAMATH COUNTIES PAINTERS:		
Brush & Roller	13.92	3.48
Spray, Sandblasting	14.52	3.48
High work - All work 60 feet or higher	14.42	3.48

PAIN0055K 01/01/2000		
	Rates	Fringes
ALL COVERED COUNTIES (EXCLUDING MORROW, UMATILLA AND		

0 WALLOWA COUNTIES)

1

2 DRYWALL FINISHERS 24.00 7.60

3 -----

4

5 PAIN0477D 12/01/1982

6

Rates

Fringes

7 MALHEUR COUNTY

8

9 LINOLEUM, CARPET AND

0 SOFT TILE APPLICATORS

13.66

1.19

1 -----

2

3 PAIN0740A 07/01/2001

4

Rates

Fringes

5 ALL COVERED COUNTIES (EXCLUDING MALHEUR COUNTY)

6

7 GLAZIERS

27.16

7.09

8 -----

9

0 PAIN1236A 04/01/2001

1

Rates

Fringes

2 ALL COVERED COUNTIES (EXCLUDING MALHEUR COUNTY)

3

4 LINOLEUM, CARPET AND

5 SOFT TILE APPLICATORS

23.52

6.38

6 -----

7

8 PLAS0082A 06/01/1999

9

Rates

Fringes

0 PLASTERERS

23.91

6.36

1 -----

2

3 PLAS0555A 06/01/2001

4

Rates

Fringes

5 CEMENT MASONS:

6

7 ZONE 1:

8 CEMENT MASONS

24.04

9.00

9 COMPOSITION WORKERS AND

0 POWER MACHINERY OPERATORS

24.48

9.00

1 CEMENT MASONS ON SUSPENDED,

2 SWINGING AND/OR HANGING

3 SCAFFOLD

24.48

9.00

4 CEMENT MASONS DOING BOTH

5 COMPOSITION/POWER MACHINERY

6 AND SUSPENDED/HANGING

7 SCAFFOLD

24.93

9.00

8

9 Zone Differential (Add To Zone 1 Rates):

0 Zone 2 - \$0.65

1 Zone 3 - 1.15

2 Zone 4 - 1.70

3 Zone 5 - 2.75

4

5 BASE POINTS: BEND, CORVALLIS, EUGENE, LONGVIEW, MEDFORD,

6 PORTLAND, SALEM, THE DALLES, VANCOUVER

7
 8 ZONE 1: Projects within 30 miles of the respective city hall
 9 ZONE 2: More than 30 miles but less than 40 miles from the
 0
 1 respective city hall.
 2 ZONE 3: More than 40 miles but less than 50 miles from the
 3 respective city hall.
 4 ZONE 4: More than 50 miles but less than 80 miles from the
 5 respective city hall.
 6 ZONE 5: More than 80 miles from the respective city hall
 7 -----
 8
 9 PLUM0290B 10/01/2001
 0 Rates Fringes
 1 BENTON, CLACKAMAS, CLATSOP, COLUMBIA, CROOK, DESCHUTES, GILLIAM,
 2 GRANT AND HARNEY (those portions which lies north and west of a
 3 north-south line drawn from the town of John Day to a point five
 4 miles east of the town of Burns and three miles south of Burns
 5 thence on an airline through the town of Wagontire west to the
 6 County lines), HOOD RIVER, JACKSON, JEFFERSON, KLAMATH, LAKE,
 7 LANE, LINCOLN, LINN, MARION, MULTNOMAH, POLK, SHERMAN, TILLAMOOK,
 8 WASCO, WASHINGTON, WHEELER AND YAMHILL COUNTIES
 9
 0 PLUMBERS AND PIPEFITTERS 31.52 11.00
 1 -----
 2
 3 PLUM0296B 07/01/2001
 4 Rates Fringes
 5 BAKER, HARNEY (Remainder of County) AND MALHEUR COUNTIES
 6
 7 PLUMBERS AND PIPEFITTERS 23.54 7.77
 8 -----
 9
 0 PLUM0598A 06/01/2001
 1 Rates Fringes
 2 GRANT (Remainder of County), MORROW, UMATILLA, UNION AND WALLOWA
 3 COUNTIES
 4
 5 PLUMBERS AND PIPEFITTERS 28.85 11.55
 6 -----
 7
 8 ROOF0049A 10/01/2000
 9 Rates Fringes
 0 BAKER, CLACKAMAS, CLATSOP, COLUMBIA, GRANT, GILLIAM, HOOD RIVER,
 1 JEFFERSON, MULTNOMAH, SHERMAN, TILLAMOOK, WASCO, WASHINGTON AND
 2 WHEELER COUNTIES.
 3
 4 ROOFERS 22.15 5.70
 5 REMOVAL OF COAL TAR PITCH 24.37 5.70
 6 -----
 7
 8 ROOF0156A 06/01/2001
 9 Rates Fringes
 0 BENTON, CROOK, DESCHUTES, HARNEY, JACKSON, KLAMATH, LAKE, LANE,
 1 LINCOLN AND LINN COUNTIES
 2 ROOFERS 17.00 5.77
 3

4	MARION, POLK AND YAMHILL COUNTIES		
5	ROOFERS	18.00	6.87
6	-----		
7			
8	ROOF0189C 07/01/2001		
9		Rates	Fringes
0	MORROW COUNTY		
1			
2	ROOFERS	17.48	5.60
3	-----		
4			
5	ROOF0209A 11/01/2001		
6		Rates	Fringes
7	MALHEUR COUNTY		
8			
9	ROOFERS	18.00	4.00
0	-----		
1			
2	* SFOR0669A 01/01/2002		
3		Rates	Fringes
4	BAKER, GILLIAM, GRANT, HARNEY, MAHLHEUR, MORROW, UMATILLA, UNION,		
5	WALLOWA AND WHEELER COS.		
6			
7	SPRINKLER FITTERS	24.35	8.05
8			
9	BENTON, CLACKAMAS, CLATSOP, COLUMBIA, CROOK, DESCHUTES,		
0	HOOD RIVER, JACKSON, JEFFERSON, KLAMATH, LAKE, LANE, LINCOLN,		
1	LINN, MARION, MULTNOMAH, POLK, SHERMAN, TILLAMOOK, WASCO,		
2	WASHINGTON AND YAMHILL COS.		
3			
4	SPRINKLER FITTERS	26.65	8.05
5	-----		
6			
7	SHEE0016A 11/01/2001		
8		Rates	Fringes
9	BENTON, CLACKAMAS, CLATSOP, COLUMBIA, CROOK, DESCHUTES, GILLIAM,		
0	GRANT, HARNEY, HOOD RIVER, JEFFERSON, LINCOLN, LINN, MARION,		
1	MULTNOMAH, POLK, SHERMAN, TILLAMOOK, WASCO, WASHINGTON, WHEELER,		
2	AND YAMHILL COUNTIES		
3			
4	SHEET METAL WORKERS	27.33	10.69
5	-----		
6			
7	SHEE0016E 01/01/2000		
8		Rates	Fringes
9	JACKSON AND KLAMATH COUNTIES		
0			
1	SHEET METAL WORKERS		
2	(INCLUDING HVAC DUCT WORK)	17.88	6.56
3	-----		
4			
5	SHEE0016F 01/01/2000		
6		Rates	Fringes
7	LAKE AND LANE COUNTIES		
8			
9	SHEET METAL WORKERS		
0	(INCLUDING HVAC DUCT WORK)	21.60	8.48

```

1 -----
2
3 SHEE0066B 06/01/2000
4 Rates Fringes
5 MORROW, UMATILLA, UNION AND WALLOWA COUNTIES
6
7 SHEET METAL WORKERS 25.43 7.30
8 -----
9
0 SHEE0213B 06/01/2001
1 Rates Fringes
2 BAKER AND MALHEUR COUNTIES
3
4 SHEET METAL WORKERS 21.71 7.71
5 -----
6
7 TEAM0037A 06/01/2001
8 Rates Fringes
9 TRUCK DRIVERS (See Footnote C):
0 ZONE 1:
1 GROUP 1 23.40 8.30
2 GROUP 2 23.52 8.30
3 GROUP 3 23.65 8.30
4 GROUP 4 23.91 8.30
5 GROUP 5 24.13 8.30
6 GROUP 6 24.29 8.30
7 GROUP 7 24.49 8.30
8
9 Zone Differential (add to Zone 1 rates):
0 Zone 2 - $0.65
1 Zone 3 - 1.15
2 Zone 4 - 1.70
3 Zone 5 - 2.75
4
5 BASE POINT CITIES
6 ALBANY ASTORIA BAKER
7 BEND BROOKINGS BURNS
8 COOS BAY CORVALLIS EUGENE
9 GOLDENDALE GRANTS PASS HERMISTON
0 HOOD RIVER KLAMATH FALLS LA GRANDE
1 LAKEVIEW LONGVIEW MADRAS
2 MEDFORD MCMINNVILLE OREGON CITY
3 NEWPORT ONTARIO PENDLETON
4 PORTLAND PORT ORFORD REEDSPORT
5
6 Zone 1 - All jobs or projects located within 30 miles of the
7 respective City Hall
8 Zone 2 - More than 30 miles and less than 40 miles from the
9 respective City Hall
0 Zone 3 - More than 40 miles and less than 50 miles from the
1 respective City Hall
2 Zone 4 - More than 50 miles and less than 80 miles from the
3 respective City Hall
4 Zone 5 - More than 80 miles from the respective City Hall.
5
6 TRUCK DRIVERS CLASSIFICATIONS
7

```

8 GROUP 1: A-frame or hydra-lift truck w/load bearing surface;
9
0 Articulated dump truck; Battery rebuilders; Bus or manhaul
1 driver; Concrete buggies (power operated); Concrete pump truck;
2 Dump trucks, side, end and bottom dumps, including semi-trucks
3 and trains or combinations thereof: up to and including 10 cu.
4 yds.; Lift jitneys, fork lifts (all sizes in loading, unloading
5 and transporting material on job site); Loader and/or leverman on
6 concrete dry batch plant (manually operated); Lubrication man,
7 fuel truck driver, tireman, wash rack, steam cleaner or
8 combination; Pilot car; Pickup Truck; Slurry truck driver or
9 leverman; Solo flat bed and misc. body truck, 0-10 tons; Team
0 drivers; Tireman; Transit mix and wet or dry mix trucks: 5 cu
1 yds. and under; Water wagons (rated capacity) up to
2 3,000 gallons
3
4 GROUP 2: Boom Truck/hydralift or Retracing crane; Challenger;
5 Dumpsters or similar equipment-all sizes; Dump
6 trucks/articulated dumps 6 cu to 10 cu.; Flaherty spreader
7 driver or leverman; Low bed equipment, flat bed semi-
8 truck and trailer or doubles transporting equipment or wet or dry
9 materials; Lumber carrier, driver-straddle carrier (used in
0 loading, unloading and transporting of materials on job site);
1 Oil distributor driver or leverman; Transit mix and wet or dry
2 mix trucks: over 5 cu. yds and including 7 cu. yds; Vacuum
3 trucks; Water Wagons (rated capacity) over 3,000 to
4 5,000 gallons
5
6 GROUP 3: Ammonia nitrate distributor driver; Dump trucks, side,
7 end and bottom dumps, including semi-trucks and trains or
8 combinations thereof: over 10 cu. yds. and including 30 cu. yds.,
9 includes articulated dump trucks; Self propelled street sweeper;
0 Transit mix and wet or dry mix trucks, over 7 cu. yds. and
1 including 11 cu. yds.; Truck Mechanic-Welder-Body Repairman;
2 Utility and cleanup truck; Water Wagons (rated capacity) over
3 5,000 to 10,000 gallons.
4
5 GROUP 4: Asphalt Burner; Dump trucks, side, end and bottom
6 dumps, including semi-trucks and trains or combinations thereof:
7 over 30 cu. yds. and including 50 cu. yds. and includes
8 articulated dump trucks; Fire Guard; Transit Mix and Wet or Dry
9 Mix Trucks, over 11 cu. yds. and including 15 cu. yds.; Water
0 Wagon (rated capacity) over 10,000 gallons to 15,000 gallons
1
2 GROUP 5: Dump trucks, side, end and bottom dumps, including
3 semi-trucks and trains or combinations thereof: over 50 cu. yds.
4 and including 60 cu. yds. and includes articulated
5 dump trucks
6
7 GROUP 6: Bulk Cement spreader w/o auger; Dry Pre Batch
8 Concrete; Mix trucks; Dump trucks, side, end and bottom dumps,
9 including semi-trucks and trains of combinations thereof: over 60
0 cu. yds. and including 80 cu. yds. and includes articulated dump
1 trucks; Skid truck
2
3 GROUP 7: Dump trucks, side, end and bottom dumps, including
4 semi-trucks and trains or combinations thereof: over 80 cu. yds.

2 contact is not satisfactory, then the process described in 2.)
3 and 3.) should be followed.

4

5 With regard to any other matter not yet ripe for the formal
6 process described here, initial contact should be with the Branch
7 of Construction Wage Determinations. Write to:

8

9 Branch of Construction Wage Determinations
0 Wage and Hour Division
1 U. S. Department of Labor
2 200 Constitution Avenue, N. W.
3 Washington, D. C. 20210

4

5 2.) If the answer to the question in 1.) is yes, then an
6 interested party (those affected by the action) can request
7 review and reconsideration from the Wage and Hour Administrator
8 (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

9

0 Wage and Hour Administrator
1 U.S. Department of Labor
2 200 Constitution Avenue, N. W.
3 Washington, D. C. 20210

4

5 The request should be accompanied by a full statement of the
6 interested party's position and by any information (wage payment
7 data, project description, area practice material, etc.) that the
8 requestor considers relevant to the issue.

9

0 3.) If the decision of the Administrator is not favorable, an
1 interested party may appeal directly to the Administrative Review
2 Board (formerly the Wage Appeals Board). Write to:

3

4 Administrative Review Board
5 U. S. Department of Labor
6 200 Constitution Avenue, N. W.
7 Washington, D. C. 20210

8

9 4.) All decisions by the Administrative Review Board are final.
0 END OF GENERAL DECISION

WAIS Document Retrieval
GENERAL DECISION MT010001 11/16/2001 MT1

Date: November 16, 2001
General Decision Number MT010001

Superseded General Decision No. MT000001

State: Montana

Construction Type:
HEAVY

County(ies):
STATEWIDE

HEAVY CONSTRUCTION PROJECTS

Modification Number	Publication Date
0	03/02/2001
1	03/23/2001
2	08/24/2001
3	11/16/2001

COUNTY(ies):
STATEWIDE

ZONE DEFINITIONS

CARPENTERS, *CEMENT MASONS, LABORERS, POWER EQUIPMENT OPERATORS,
AND TRUCK DRIVERS

The zone hourly rates applicable to each project shall be determined by measuring the road miles over the shortest practical maintained route from the nearest County Court House of the following listed towns to the center of the job:

Billings	Great Falls	Kalispell	Missoula
Bozeman	Havre	Lewistown	
Butte	Helena	Miles City	

ZONE 1:	0 to 30 miles	Base Pay
ZONE 2:	30 to 60 miles	Base Pay + \$2.20
ZONE 3:	Over 60 miles	Base Pay + \$3.70

*CEMENT MASONS ZONES: The above cities plus
DILLON GLASGOW GLENDIVE SIDNEY

CARP0028B 05/16/2000

	Rates	Fringes
STATEWIDE EXCEPT BEAVERHEAD AND SILVER BOW COUNTIES		

CARPENTERS:
ZONE 1:

Carpenters	18.65	4.55
Piledrivermen	18.65	4.55
Millwrights	20.15	4.55

CARP0028D 06/01/2000		
	Rates	Fringes
STATEWIDE EXCEPT BEAVERHEAD AND SILVER BOW COUNTIES		
DIVERS	54.93	5.70
TENDERS	26.25	5.70

CARP0112A 05/01/1998		
	Rates	Fringes
BEAVERHEAD AND SILVER BOW COUNTIES		
CARPENTERS [Zone pay not applicable]:		
Carpenter	16.71	4.82
Millwright	17.21	4.82
Pile Driver	17.71	4.82

ELEC0044A 06/01/2001		
	Rates	Fringes
BEAVERHEAD, BIG HORN, BLAINE, BROADWATER, CARBON, CARTER, CASCADE, CHOUTEAU, CUSTER, DANIELS, DAWSON, DEER LODGE, FALLON, FERGUS, GALLATIN, GARFIELD, GLACIER, GOLDEN VALLEY, GRANITE, HILL, JEFFERSON, JUDITH, BASIN, LEWIS AND CLARK, LIBERTY, MADISON, MCCONE, MEAGHER, MINERAL, MISSOULA, MUSSELSHELL, PARK, PETROLEUM, PHILLIPS, PONDERA, POWDER RIVER, POWELL, PRAIRIE, RAVALLI, RICHLAND, ROOSEVELT, ROSEBUD, SHERIDAN, SILVER BOW, STILWATER, SWEET GRASS, TETON, TOOLE, TREASURE, VALLEY, WHEATLAND, WIBAUX, AND YELLOWSTONE COUNTIES		
LINE CONSTRUCTION:		
Lineman	25.04	4.25%+6.71
Equipment Operator	20.03	4.25%+6.34
Experienced Groundman	16.28	4.25%+6.07

ELEC0233A 06/01/2001		
	Rates	Fringes
BLAINE, CASCADE, CHOUTEAU, FERGUS, GLACIER, HILL, JUDITH BASIN, LIBERTY, PETROLEUM, PHILLIPS, PONDERA, TETON, TOOLE, VALLEY, AND WHEATLAND COUNTIES		
ELECTRICIANS	22.13	4.25%+6.14

ELEC0233B 06/01/2001		
	Rates	Fringes
BEAVERHEAD, DEER LODGE, GRANITE, JEFFERSON, MADISON, POWELL, AND SILVER BOW COUNTIES		
ELECTRICIANS	21.65	4.25%+6.56

ELEC0233F 06/01/2001		
	Rates	Fringes
BROADWATER, LEWIS AND CLARK, AND MEAGHER COUNTIES		
ELECTRICIANS	22.13	4.25%+6.14

ELEC0532A 06/01/2001		
	Rates	Fringes
GALLATIN, PARK, AND SWEET GRASS COUNTIES		
ELECTRICIANS	20.74	4.25%+6.07

ELEC0532C 06/01/2001		
	Rates	Fringes
BIG HORN, CARBON, CARTER, CUSTER, DANIELS, DAWSON, FALLON, GARFIELD, GOLDEN VALLEY, McCONE, MUSSELSHELL, POWDER RIVER, PRAIRIE, RICHLAND, ROOSEVELT, ROSEBUD, SHERIDAN, STILLWATER, TREASURE, WIBAUX AND YELLOWSTONE COUNTIES		
ELECTRICIANS	22.63	4.25%+6.46

ELEC0768A 06/01/2001		
	Rates	Fringes
FLATHEAD, LAKE, LINCOLN, MINERAL, MISSOULA, RAVALLI, AND SANDERS COUNTIES		
ELECTRICIANS	23.00	7.28

ELEC0768C 12/01/2000		
	Rates	Fringes
FLATHEAD, LAKE, AND LINCOLN COUNTIES		
LINE CONSTRUCTION:		
Cable Splicer	26.79	4.25%+6.41
Lineman	24.61	4.25%+6.32
Tree Trimmer	21.96	4.25%+6.21
Pole Sprayer	21.12	4.25%+6.17
Line Equipment Operator	20.28	4.25%+6.14
Experienced Groundman	16.24	4.25%+5.96

ENGI0400A 05/01/2001		
	Rates	Fringes
POWER EQUIPMENT OPERATORS:		
ZONE 1:		
GROUP 1	17.74	4.90
GROUP 2	18.16	4.90

GROUP 3	18.53	4.90
GROUP 4	18.78	4.90
GROUP 5	19.76	4.90
GROUP 6	20.27	4.90
GROUP 7	21.81	4.90

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Air Compressor; Auto Fine Grader; Belt Finishing Machine; Boring Machine, small; Cement Silo; Crane, A-Frame Truck Crane; Crusher Conveyor; DW-10, 15, and 20 Tractor Roller; Farm Tractor; Forklift; Form Grader; Front-end Loader under 1 cu yd; Heavy Duty Drills; Herman Nelson Heater; Mulching Machine; Oiler, all except Cranes. & Shovels; Pumpman.

GROUP 2: Air Doctor; Backhoe/Excavator/Shovel to and including 3 cu yd; Bit Grinder; Bituminous Paving Travel Plant; Boring Machine, large; Broom, self-propelled; Concrete Travel Batchter; Concrete Float & Spreader; Concrete Bucket Dispatcher; Concrete Finish Machine; Concrete Conveyor; Distributor; Dozer, Rubber-

Tired, Push & Side Boom; Elevating Grader/Gradall; Field Equipment Serviceman; Front-end Loader 1 cu yd to including 5 cu yd; Grade Setter; Heavy Duty Drills, all types; Hoist/Tugger, all; Hydralift & similar; Industrial Locomotive; Motor Patrol, except Finish; Mountain Skidder; Oiler - Cranes & Shovels; Pavement Breaker, EMSCO; Power Saw, self-propelled; Pugmill; Pumpcrete/Grout Machine; Punch Truck; Roller, other than Asphalt; Roller, Sheepsfoot, self-propelled; Roller, 25 tons and over; Ross Carrier; Rotomill under 6 ft; Trenching Machine; Washing/Screening Plant.

GROUP 3: Asphalt Paving Machine; Asphalt Screed; Backhoe/Excavator/Shovel over 3 cu yd; Cableway Highline; Concrete Batch Plant; Concrete Curing Machine; Concrete Pump; Cranes, Creter; Cranes, Electric Overhead; Cranes, 24 tons and under; Curb Machine/Slip Form Paver; Finish Dozer; Front-end Loader over 5 cu yd; Mechanic/Welder; Pioneer Dozer; Roller, Asphalt (Breakdown & Finish); Rotomill, over 6 ft; Scraper, single, twin, or pulling Belly Dump; Yo-Yo Cat.

GROUP 4: Asphalt/Hot Plant Operator; Cranes, 25 tons to 44 tons; Crusher Operator; Finish Motor Patrol; Finish Scraper.

GROUP 5: Cranes, 45 tons to including 74 tons; Crane, Tower, all.

GROUP 6: Cranes, 75 tons to including 149 tons; Crane, Whirley, all.

GROUP 7: Cranes, 150 tons to including 250 tons (add \$1.00 for every 100 tons over 250 tons); Crane, Stiff-Leg or Derrick; Helicopter Hoist.

IRON0014C 07/01/2001

Rates

Fringes

FLATHEAD, GLACIER, LAKE, LINCOLN, MINERAL, MISSOULA, AND SANDERS
COUNTIES

IRONWORKERS	20.52	10.53
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* IRON0841B 10/01/2001		
	Rates	Fringes

REMAINING COUNTIES

IRONWORKERS	18.80	10.61
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* LAB00098A 05/01/2000		
	Rates	Fringes

LABORERS:

ZONE 1:		
GROUP 1	13 41	4.40
GROUP 2	16.19	4.40
GROUP 3	16.33	4.40
GROUP 4	17.05	4.40

LABORERS CLASSIFICATIONS

GROUP 1: Flagperson

GROUP 2: All General Labor work; Burning Bar; Bucket man; Carpenter Tender; Caisson Worker; Cement Mason Tender; Cement Handler (dry); Chuck Tender; Choker Setter; Concrete worker; Curb Machine-Lay Down; Crusher and Batch worker; Fence Erector; Form Setter; Form Stripper; Heater Tender; Landscaper; Pipe Wrapper; Pot Tender; Powderman Tender; Rail and Truck Loaders and Unloaders; Riprappet; Sealants for concrete and other materials; Sign Erection, Guard Rail and Jersey Rail; Stake Jumper; Spike Driver; Signalman; Tail Hoseman; Tool Checker and Houseman; Traffic Control worker.

GROUP 3: Concrete Vibrator; Dumpman (Grademan); Equipment Handler; Geotextile and Liners; High-Pressure Nozzleman; Jackhammer (Pavement Breaker); Laser Equipment; Non-Riding Rollers; Pipelayer; Posthole Digger (Power); Power Driven Wheelbarrow; Rigger; Sandblaster; Sod Cutter-Power; Tampers

GROUP 4: Asphalt Raker; Cutting Torch; Grade Setter; High-Scaler; Power Saws (Faller & Concrete); Powderman (\$1.00 per hour above Group 4 rate); Rock & Core Drill; Track or Truck mounted Wagon Drill; Welder including Air Arc

PAIN0260A 07/01/1999		
	Rates	Fringes

BLAINE, BROADWATER, CASCADE, CHOUTEAU, DANIELS, FERGUS, GARFIELD, GLACIER, GRANITE (South of a line running East & West through the Southern city limits of Phillipsburg), HILL, JEFFERSON, JUDITH BASIN, LEWIS AND CLARK, LIBERTY, McCONE,

MEAGHER, PETROLEUM, PHILLIPS, PONDERA, POWELL (South of a line running East & West through the Southern City limits of Helmsville), RICHLAND, ROOSEVELT, SHERIDAN, TETON, TOOLE, VALLEY, AND WHEATLAND COUNTIES

PAINTERS	13.35	1%+2.75
----------	-------	---------

PAIN0260C 07/01/2001

	Rates	Fringes
--	-------	---------

FLATHEAD, GRANITE (North of a line running East & West through the Southern city limits of Phillipsburg), LAKE, LINCOLN, MINERAL, MISSOULA, POWELL (North of a line running East & West through the Southern city limits of Helmsville), RAVALLI, AND SANDERS COUNTIES

PAINTERS	16.35	3.57
----------	-------	------

PAIN1922A 06/01/2000

	Rates	Fringes
--	-------	---------

BEAVERHEAD, BIG HORN, CARBON, CARTER, CUSTER, DAWSON, DEER LODGE, FALLON, GALLATIN, GOLDEN VALLEY, JEFFERSON, MADISON, MUSSELSHELL, PARK, POWDER RIVER, PRAIRIE, ROSEBUD, SILVER BOW, STILLWATER, SWEET GRASS, TREASURE, WIBAUX, AND YELLOWSTONE COUNTIES

INDUSTRIAL PAINTERS [Includes Industrial Plants, Tanks, Pipes, Bridges]	17.55	7.13
-------------------------------------------------------------------------------	-------	------

PLAS0119A 05/01/2000

	Rates	Fringes
--	-------	---------

STATEWIDE (except Deer Lodge, Jefferson, Powell, and Silver Bow Counties)

CEMENT MASONS: ZONE 1	16.23	5.10
--------------------------	-------	------

DEER LODGE, JEFFERSON, POWELL, AND SILVER BOW COUNTIES

CEMENT MASONS: ZONE 1	17.30	5.10
--------------------------	-------	------

* PLUM0030C 09/01/2001

	Rates	Fringes
--	-------	---------

BIGHORN, BLAINE, CARBON, CARTER, CASCADE, CHOUTEAU, CUSTER, DANIELS, DAWSON, FALLON, FERGUS, GARFIELD, GLACIER, GOLDEN VALLEY, HILL, JUDITH BASIN, LIBERTY, McCONE, MEAGHER, MUSSELSHELL, PETROLEUM, PHILLIPS, PONDERA, POWDER RIVER, PRAIRIE, RICHLAND, ROOSEVELT, ROSEBUD, SHERIDAN, STILLWATER, TETON, TOOLE, TREASURE, VALLEY, WHEATLAND, WIBAUX AND YELLOWSTONE COUNTIES

PLUMBERS	23.15	8.90
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PLUM0041A 07/01/2001

Rates Fringes
BEAVERHEAD, BROADWATER, DEER LODGE, GALLATIN, GRANITE, JEFFERSON,
LEWIS AND CLARK, MADISON, PARK, POWELL, SILVER BOW, AND SWEET
GRASS COUNTIES

	Rates	Fringes
PLUMBERS	23.65	7.30

PLUM0459A 05/01/2001

Rates Fringes
FLATHEAD, GLACIER, LAKE, LINCOLN, MINERAL, MISSOULA, RAVALLI,
AND SANDERS

	Rates	Fringes
PLUMBERS	22.56	7.45

TEAM0002A 06/01/1999

Rates Fringes
TRUCK DRIVERS:

	Rates	Fringes
ZONE 1:		
GROUP 1	13.31	4.96
GROUP 2	17.34	4.96

TRUCK DRIVERS CLASSIFICATIONS:

GROUP 1: Pilot Car

GROUP 2: All Combination Trucks and Concrete Mixers; Distributor Driver; All Dry Batch Trucks; Dumpman, Gravel Spreader Box Operator; All Dump Trucks and similar equipment including DW 20, DW 21, or Euclid Tractor; Dumpsters; Flat Trucks; Servicemen; Lowboys, Four-Wheel Trailers; Float Semi-Trailer; Lumber Carriers, Lift Trucks & Fork Lifts; Pick-up Driver hauling material; Powder Truck (Bulk Unloader type); Power Boom; Service Truck Drivers, Fuel Truck Drivers, Tiremen; All Water Tank Drivers; Petroleum Products Drivers; Trucks with Power Equipment such as Winch, A-Frame Truck, Crane, Hydralift, Gout-Crete Truck, and Combination Mulching, Seeding & Fertilizing Truck; Truck Mechanic

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(v)).

In the listing above, the "SU" designation means that rates listed under that identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations

indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

4.) All decisions by the Administrative Review Board are final.
END OF GENERAL DECISION

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General Decision Number ID010001

General Decision Number **ID010001**
Superseded General Decision No. ID000001
State: Idaho
Construction Type:
HEAVY
HIGHWAY
County(ies):
STATEWIDE
HEAVY AND HIGHWAY CONSTRUCTION PROJECTS

Modification Number	Publication Date
0	03/02/2001
1	03/09/2001
2	03/30/2001
3	04/06/2001
4	05/11/2001
5	06/01/2001
6	06/15/2001
7	06/22/2001
8	07/06/2001
9	07/13/2001
10	08/03/2001
11	08/31/2001
12	10/05/2001
13	11/16/2001
14	12/14/2001
15	01/04/2002

COUNTY(ies):

STATEWIDE

CARP0001D 06/01/2001

	Rates	Fringes
AREA 1:		
CARPENTERS	22.81	5.70
PILEDRIVERS	23.91	5.70
MILLWRIGHTS	23.07	5.70
DIVERS	56.52	5.70
DIVERS TENDERS	26.90	5.70

* CARP0808A 01/01/2002

	Rates	Fringes
AREA 2:		
ZONE 1:		
CARPENTERS	20.76	6.86
PILEDRIVERS	20.93	6.86
MILLWRIGHTS AND MACHINE ERECTORS	21.05	6.86
DIVERS	50.72	6.86
DIVERS TENDERS	20.66	6.86
Zone Differential (Add to Zone 1 rates):		
Zone 2 - \$1.00		

* ELEC0073D 01/01/2002

	Rates	Fringes
KOOTENAI COUNTY		
ELECTRICIANS	24.27	3%+9.13
CABLE SPLICERS	24.67	3%+9.13

ELEC0077A 02/01/2001		
	Rates	Fringes
AREA 1:		
LINE CONSTRUCTION:		
CABLE SPLICERS	33.89	3.875%+6.95
LINEMEN, POLE SPRAYERS, HEAVY LINE EQUIPMENT MAN	30.58	3.875%+6.95
LINE EQUIPMENT MEN	26.72	3.875%+5.20
POWDERMEN, JACKHAMMERMEN	23.69	3.875%+5.20
GROUNDMEN	22.31	3.875%+5.20
TREE TRIMMER	21.39	3.875%+5.20

ELEC0291B 06/01/1999		
	Rates	Fringes
ADAMS, ADA, BOISE, CANYON, ELMORE, GEM, OWYHEE, PAYETTE, VALLEY AND WASHINGTON COUNTIES		
ELECTRICIANS (including traffic signalization)	21.63	5.67+4.4%

ELEC0291C 03/01/1999		
	Rates	Fringes
AREA 2:		
CABLE SPLICER	27.59	4.25%+5.20
LINEMAN	25.00	4.25%+5.20
LINE EQUIPMENT MECHANIC (RIGHT-OF-WAY)	21.17	4.25%+5.20
LINE EQUIPMENT OPERATOR	21.17	4.25%+5.20
GROUNDMAN	15.45	4.25%+4.87

* ENGI0370B 01/01/2002		
	Rates	Fringes
AREA 2:(Anyone working on HAZMAT jobs working with supplied air shall receive \$1.00 per hour above classification)		
THERE IS A HAZMAT CLASSIFICATION INCLUDED IN EACH GROUP		
POWER EQUIPMENT OPERATORS:		
ZONE 1:		
GROUP 1	21.04	5.92
GROUP 2	21.20	5.92
GROUP 3	21.57	5.92
GROUP 4	21.88	5.92
GROUP 5	22.05	5.92
GROUP 6	22.23	5.92
GROUP 7	22.59	5.92
GROUP 8	22.82	5.92
GROUP 9	23.05	5.92
GROUP 10	23.30	5.92

Zone Differential (Add to Zone 1
rate): Zone 2 - \$1.50

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Brakeman; Crusher Plant Feeder (Mechanical); Deckhand;
Grade Checker; Heater Tender; Land Plane; Pumpman

GROUP 2: Air Compressor; Assistant Refrigeration Plant
Operator; Bell Boy; Bit Grinder Operator; Blower Operator
(cement); Bolt Threader Machine Operator; Broom; Cement Hog;
Concrete Mixer; Concrete Saw multiple cut; Discing - Harrowing or
Mulching (regardless of motive power); Distributor Leverman;

Drill Steel Threader Machine Operator; Fireman-all; Hoist-single drum; Hydraulic Monitor Operator-skid mounted; Oiler (single piece of equipment); Crusher Oiler; Pugmixer-Box Operator; Spray Curing Machine; Tractor-rubber tired farm type using attachments

GROUP 3: A-Frame Truck (hydra lift, Swedish Cranes, Ross Carrier, Hyster on construction jobs); Battery Tunnel Locomotive; Belt Finishing Machine; Cable Tenders (underground); Chip Spreader Machine (self-propelled); Hoist-2 or more drums or Tower Hoist; Hydralift-Fork lift & similar (when hoisting); Oilers (underground); Power Loader (bucket elevator conveyors); Rodman; Road Roller (regardless of motive power)

GROUP 4: Boring Machines (earth or rock); Quarrymaster-Joy-tractor mounted, Drills: Churn-Core-Calyx or Diamond; Front End & Overhead Loaders and similar machines-(up to and including 4 yds)(rubber-tired); Grout Pump; Hydra-Hammer; Locomotive Engineer; Longitudinal Float Machine; Mobilemixer; Spreader Machine; Tractor-rubber tired-using Backhoe, Transverse Finishing Machine; Trenching Machines; Waggoner Compactor and similar; Asphalt Spreaders

GROUP 5: Concrete Plant Operator; Concrete Road Paver (dual); Elevating Grader Operator; Euclid Elevating Loader; Generator Plant Operator-Mechanic (diesel electric); Post Hole Auger or Punch Operator; Power Shovels, Backhoes and Draglines (under 3/4 yd); Pumpcrete; Refrigeration Plant Operator(1000 tons and under; Road Roller(finish high type pavement); Service Equipment Oiler; Skidder-rubber tired; Sub Grader; Multiple Station Beltline Operator; Screed Operator

GROUP 6: Asphalt Pavers-self propelled; Asphalt Plant Operator; Blade Operator (motor patrol); Concrete Slip Form Paver; Cranes - up to and including 50 ton; Crusher Plant Operator; Derrick Operator; Drilling Equipment (bit under 8 inches) - Robbins Reverse Circulation and similar; Front End and Overhead Loaders and similar machines-over 4 yds to and including 7 yds; Koehring Scooper; Heavy Duty Mechanic or Welder; Mucking Machine (underground); Multi-batch Concrete Plant Operator; Piledriver Engineer; Power Shovels, Backhoes and Draglines (3/4 yd to and including 3 1/2 yds), Tractor-crawler type-including all attachments; Refrigeration Plant Operator (over 1,000 tons); Trimmer Machine Operator; Concrete Pump Boom Truck; All Scrapers up to and including 40 yards

GROUP 7: Cableway Operator; Continuous Excavator (Barber Greene WL-50); Cranes-over 50 tons; Dredges; Drilling Equipment (bit 8 inches and over)-Robbins Reverse Circulation & similar; Fine Grader-CMI or equivalent; Front End & Overhead Loaders & similar machines-(over 7 yards); Power Shovels & Draglines over 3 1/2 yards; Quad type Tractors with all attachments; all Scrapers, pulling wagons, belly dumps and attachments (over 40 yards to and including 60 yards); Multiple Scraper Units; Tower Crane Operator

GROUP 8: Scrapers - Euclid & similar, pulling wagons, belly dumps and attachments, over 60 yards to and including 80 yards

GROUP 9: Scrapers - Euclid and similar, pulling wagons, belly dumps and attachments, over 80 yards to and including 100 yards

GROUP 10: Scrapers - Euclids and similar, pulling wagons, belly dumps and attachments, over 100 yards

BOOM PAY: All Cranes and Concrete Pump Boom Trucks

100 ft to 150 ft	\$.15 over scale
150 ft to 200 ft	\$.30 over scale
Over 200 ft	\$.45 over scale

NOTE: In computing the length of the boom on Tower Cranes, they shall be measured from the base of the tower to the point of the boom.

 ENGI0370D 06/01/2001

	Rates	Fringes
AREA 1: (Anyone working on HAZMAT jobs working with supplied air shall receive \$1.00 per hour above classification)		

POWER EQUIPMENT OPERATORS:

ZONE 1:

GROUP 1A	20.94	6.02
GROUP 1	21.49	6.02
GROUP 2	21.81	6.02
GROUP 3	22.42	6.02
GROUP 4	22.58	6.02
GROUP 5	22.74	6.02
GROUP 6	23.02	6.02
GROUP 7	23.29	6.02
GROUP 8	24.39	6.02

Zone Differential (Add to Zone 1 rate): Zone 2- \$2.00

BASE POINTS: Spokane, Moses Lake, Pasco, Washington; Lewiston, Idaho

Zone 1: Within 45 radius miles from the main post office

Zone 2: Outside 45 radius miles from the main post office

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1A: Boat Operator; Crush Feeder; Oiler; Steam Cleaner

GROUP 1: Bit Grinders; Bolt Threading Machine; Compressors (under 2000 CFM, gas, diesel, or electric power); Deck Hand; Drillers Helper (assist driller in making drill rod connections, service drill engine and air compressor, repair drill rig and drill tools, drive drill support truck to and one the job site, remove drill cuttings from around bore hole and inspect drill rig while in operator); Fireman & Heat Tender; Grade Checker; Hydro-seeder, Mulcher, Nozzleman; Oiler Driver, & Cable Tender, Mucking Machine; Pumpman; Rollers, all types on subgrade, including seal and chip coatings (farm type, Case, John Deere & similar, or Compacting Vibrator), except when pulled by Dozer with operable blade; Welding Machine

GROUP 2: A-frame Truck (single drum); Assistant Refrigeration Plant (under 1000 ton); Assistant Plant Operator, Fireman or Pugmixer (asphalt); Bagley or Stationary Scraper; Belt Finishing Machine; Blower Operator (cement); Cement Hog; Compressor (2000 CFM or over, 2 or more, gas, diesel or electric power); Concrete Saw (multiple cut); Distributor Leverman; Ditch Witch or similar; Elevator Hoisting Materials; Dope Pots (power agitated); Fork Lift or Lumber Stacker, hydra-lift & similar; Gin Trucks (pipeline); Hoist, single drum; Loaders (bucket elevators and conveyors); Longitudinal Float; Mixer (portable-concrete); Pavement Breaker, Hydra-Hammer & similar; Power Broom; Railroad Ballast Regulation Operator (self-propelled); Railroad Power Tamper Operator (self-propelled); Railroad Tamper Jack Operator (self-propelled); Spray Curing Machine (concrete); Spreader Box (self-propelled); Straddle Buggy (Ross & similar

on construction job only); Tractor (Farm type R/T with attachment, except Backhoe); Tugger Operator

GROUP 3: A-frame Truck (2 or more drums), Assistant Refrigeration Plant & Chiller Operator (over 1000 ton); Backfillers (Cleveland & similar); Batch Plant & Wet Mix Operator, single unit (concrete); Belt-Crete Conveyors with power pack or similar; Belt Loader (Kocal or similar); Bending Machine; Bob Cat; Boring Machine (earth); Boring Machine (rock under 8" bit)(Quarry Master, Joy or similar); Bump Cutter (Wayne, Saginaw or similar); Canal Lining Machine (concrete); Chipper (without crane); Cleaning & Doping Machine (pipeline); Deck Engineer; Elevating Belt-type Loader (Euclid, Barber Green & similar); Elevating Grader-type Loader (Dumort, Adams or similar); Generator Plant Engineers (diesel or electric); Gunnite Combination Mixer & Compressor; Locomotive Engineer; Mixermobile; Mucking Machine; Posthole Auger or Punch; Pump (grout or jet); Soil Stabilizer (P & H or similar); Spreader Machine; Tractor (to D-6 or equivalent) and Traxcavator; Traverse Finish Machine; Turnhead Operator

GROUP 4: Concrete Pumps (squeeze-crete, flow-crete, pump-crete, Whitman & similar); Curb Extruder (asphalt or concrete); Drills (churn, core, calyx or diamond)(operates drilling machine, drive or transport drill rig to and on job site and weld well casing); Equipment Serviceman, Greaser & Oiler; Hoist (2 or more drums or Tower Hoist); Loaders (overhead & front-end, under 4 yds. R/T); Refrigeration Plant Engineer (under 1000 ton); Rubber-tired Skidders (R/T with or without attachments); Surface Heater & Planer Machine; Trenching Machines (under 7 ft. depth capacity); Turnhead (with re-screening); Vacuum Drill (reverse circulation drill under 8" bit)

GROUP 5: Backhoe (under 45,000 gw); Backhoe & Hoe Ram (under 3/4 yd.); Carrydeck & Boom Truck (under 25 tons); Cranes (25 tons & under), all attachments including clamshell, dragline; Derricks & Stifflegs (under 65 tons); Drilling Equipment (8" bit & over)(Robbins, reverse circulation & similar)(operates drilling machine, drive or transport drill rig to and on job site and weld well casing); Hoe Ram; Piledriving Engineers; Paving (dual drum); Railroad Track Liner Operator (self-propelled); Refrigeration Plant Engineer (1000 tons & over); Signaller (Whirleys, Highline Hammerheads or similar)

GROUP 6: Asphalt Plant Operator; Automatic Subgrader (Ditches & Trimmers) (Autograde, ABC, R.A. Hansen & similar on grade wire); Backhoes (45,000 gw and over to 110,000 gw); Backhoes & Hoe Ram (3/4 yd. to 3 yd.); Batch Plant (over 4 units); Batch & Wet Mix Operator (multiple units, 2 & incl. 4); Blade Operator (motor Patrol & Attachments, Athey & Huber); Boom Cats (side); Cableway Controller (dispatcher); Clamshell Operator (under 3 yds.); Compactor (self-propelled with blade); Concrete Pump Boom Truck; Concrete Slip Form Paver; Cranes (over 25 tons, including 45 tons), all attachments including clamshell, dragline; Crusher, Grizzle and Screening Plant Operator; Dozer, 834 R/T & similar; Draglines (under 3 yds.); Drill Doctor; H.D. Mechanic; H.D. Welder; Loader Operator (front-end & overhead, 4 yds. incl. 8 yds.); Multiple Dozer Units with single blade; Paving Machine (asphalt and concrete); Quad-Track or similar equipment; Roller (finishing asphalt pavement); Roto Mill (pavement grinder); Scrapers, all, Rubber-tired; Screed

Operator; Shovel (under 3 yds.); Tractors (D-6 & equivalent & over); Trenching Machines (7 ft. depth & over); Tug Boat Operator; Vactor Guzzler, Super Sucker
 GROUP 7: Backhoe (over 110,000 gw); Backhoes & Hoe Ram (3 yds. & over); Blade (finish & bluetop) Automatic, CMI, ABC, Finish Athey & Huber & similar when used as automatic; Cableway Operators; Concrete Cleaning/Decontamination Machine Operator; Cranes (over 45 tons to but not including 85 tons), all attachments including clamshell, dragline; Derricks & Stifflegs (65 tons & over); Elevating Belt (Holland type); Heavy Equipment Robotics Operator; Loader (360 degrees revolving Koehring Scooper or similar); Loaders (overhead & front-end, over 8 yds. to 10 yds.); Rubber-tired Scrapers (multiple engine with three or more scrapers); Shovels (3 yds. & over); Ultra High Pressure Waterjet Cutting Tool System Operator (30,000 psi); Vacuum Blasting Machine Operator; Whirleys & Hammerheads, ALL
 GROUP 8: Cranes (85 tons and over, and all climbing, overhead, rail and tower); Loaders (overhead and front-end, 10 yards and over); Helicopter Pilot
 BOOM PAY: (All Cranes, including Tower)
 180' to 250' \$.30 over scale
 Over 250' \$.60 over scale
 NOTE: In computing the length of the boom on Tower Cranes, they shall be measured from the base of the Tower to the point of the boom.

 IRON0014A 07/01/2001

	Rates	Fringes
ADAMS (REMAINDER), BENEWAH, BONNER, CLEARWATER, IDAHO, KOOTENAI, LATAH, LEMHI (NW CORNER), NEZ PERCE, SHOSHONE, VALLEY (NW 1/3) AND WASHINGTON (NW 1/2) COUNTIES		
IRONWORKERS	24.52	11.35

 IRON0732A 06/01/2001

	Rates	Fringes
ADA, ADAMS (E. CORNER), BANNOCK, BEAR LAKE, BINGHAM, BLAINE, BOISE, BUTTE, BONNEVILLE, CAMAS, CANYON, CARIBOU, CASSIA, CLARK, CUSTER, ELMORE, FRANKLIN, FREMONT, GEM GOODING, JEFFERSON, JEROME, LEMHI (REMAINDER), LINCOLN, MADISON, MINIDOKA, ONEIDA, OWYHEE, PAYETTE, POWER, TETON, TWIN FALLS, VALLEY (SE 2/3) AND WASHINGTON (SE 1/2) COUNTIES		
IRONWORKERS	20.13	9.21

 * LAB00155A 01/01/2002

	Rates	Fringes
AREA 2: (Anyone working on HAZMAT jobs working with supplied air shall receive \$1.00 per hour above classification)		
THERE IS A HAZMAT CLASSIFICATION IN EACH GROUP		
LABORERS:		
ZONE 1:		
GROUP 1	18.38	6.90
GROUP 2	18.48	6.90
GROUP 3	18.58	6.90
GROUP 4	18.68	6.90
GROUP 5	18.73	6.90

GROUP 6	18.98	6.90
GROUP 7	19.23	6.90
GROUP 8	18.63	6.90
GROUP 9	18.78	6.90
GROUP 10	18.88	6.90

Zone Differential (Add to Zone 1
rate): Zone 2 - \$1.00

LABORERS CLASSIFICATIONS

GROUP 1: General laborers; Sloper, cleaning and grading; Form stripper; Concrete crew; Concrete curing crew; Carpenter tender; Asphalt laborer; Hopper tender; Flagman (including Pilot car); Watchman; Heater Tender; Stake jumper; Choker setters; Spreader and weighman; Scouring concrete; Rip Rap Man (hand placed); Crusher tender; Cribbing and shoring (in open ditches); Machinery and parts cleaner; Leverman, manual or mechanical; Demolition, salvage; Landscaper; Tool roomman; Traffic Stripping Crew; Asbestos Abatement Laborers; Janitor (detail clean-up, such as but not limited to cleaning floors, ceilings, walls, windows, etc., prior to final acceptance by the owner)

GROUP 2: Chuck tender; Driller tender; Air tampers; Gunnite nozzle man tender; Pipewrapper; Tar pot tender; Concrete sawyer; Concrete Grinder; Signalman, handling cement; Dumpman; Steam nozzle man; Air and water nozzle man (Green Cutter, Concrete); Vibrator (less than 4"); Pumpcrete and grout pump crew; hydraulic Monitor; Hydro Blaster

GROUP 3: Pipelayer, including sewer, drainage, sprinkler systems and water lines; Free Air Caisson; Jackhammer; Paving Breaker; Chipping Gun Concrete; Powderman Tender; Asphalt Raker; Gasoline powered Tamper; Electric Ballast Tamper; Sand Blasting; Form Setter, airport paving; Gunman (Gunitite); Manhole Setter; Hand guided machines, such as Roto Tillers, Trenchers, Post-Hole Diggers, Walking Garden Tractors, etc.; Cutting Torch

GROUP 4: Hod Carrier; Mason Tender; Plaster Tender; Mason Tender (concrete); Terrazzo-Tile Tender

GROUP 5: Highscaler; Wagon Drill; Grade Checker; Gunnite Nozzle man; Timber faller and buckler

GROUP 6: Diamond Drills; Drillers on Drills with Manufacturers rating 3" or over

GROUP 7: Powderman

UNDERGROUND WORK

GROUP 8: Reboundman; Chucktender; Nipper; Dumpman; Vibrator (less than 4"); Brakeman; Mucker; Bullgang

GROUP 9: Form Setter and Mover

GROUP 10: Miners; Machineman; Timbermen; Steelmen; Drill Doctors; Spaders and Tuggers; Spilling and/or Caisson Workers; Vibrator (over 4")

LAB00238B 06/01/2001

	Rates	Fringes
AREA 1:		
LABORERS:		
ZONE 1:		
GROUP 1	17.66	5.00
GROUP 2	19.76	5.00
GROUP 3	20.03	5.00
GROUP 4	20.30	5.00
GROUP 5	20.58	5.00

BASE POINTS: Spokane, Moses Lake, Pasco, Lewiston
Zone 1: 0-45 radius miles from the main post office.
Zone 2: 45 radius miles and over from the main post office

GROUP 1: Flagman; Landscape Laborer, Scaleman; Traffic Control
Maintenance Laborer (to include erection and maintenance of
barricades, signs, and relief of flagperson); Window Washer;
Washer/Cleaner(Detail cleanup, such as but notlimited to cleaning
floors, ceilings, walls, windows, etc. prior to final acceptance
by the owner)

GROUP 3: Asphalt Roller, walking; Cement Finisher Tender; Concrete Saw, walking; Demolition Torch; Dope Pot Firemen, non-mechanical; Form Setter, paving; Grader Checker Using Level; Jackhammer Operator Miner, Class B (to include brakeman, finisher, vibrator, form setter); Nozzleman (to include squeeze and flo-crete nozzle); Nozzleman, water, air or steam; Pavement Breaker (under 90 lbs.); Pipelayer, corrugated metal culvert; Pipelayer, multi-plate; Pot Tender; Power Buggy Operator; Power Tool Operator, gas, electric, pneumatic; Railroad Equipment, power driven, except dual mobile power spiker or puller; Railroad Power Spiker or Puller, dual mobile; Rodder and Spreader; Tamper (to include operation of Barco, Essex and similar tampers); Trencher, Shawnee; Tugger Operator; Wagon Drills; Water Pipe Liner; Wheelbarrow, power driven

ID010001-8

nozzleman, over 1,200 lbs., jet blast machine power-propelled, sandblast nozzle); Pavement Breaker, 90 lbs. and over Pipelayer (to include working topman, caulker, collerman, jointer, mortarman, rigger, jacker, shorer, valve or meter installer, tamper); Pipewrapper; Plasterer Tenders; Vibrators, all
 GROUP 5 - Drills with dual masts; Hazardous Waste Worker, Level A; Miner Class "D" (to include raise and shaft miner, laser beam operator on raises and shafts)
 GROUP 6 - Powderman

LAB00238F 06/01/2001		
	Rates	Fringes
AREA 1		
HOD CARRIERS	21.35	5.00

PAIN0005E 07/01/2001		
	Rates	Fringes
KOOTENAI COUNTY		
PAINTERS*:		
Brush, Roller, Paperhanger,		
striping, Steam Cleaning and		
Spray	19.17	4.24

*\$.70 shall be paid over and above the basic wage rates listed for work on swing stages and high work over 30 feet.

PLAS0072A 06/01/1999		
	Rates	Fringes
AREA 1:		
ZONE 1:		
CEMENT MASONS	21.57	5.24
Zone Differential (Add to Zone 1		
rate): Zone 2 - \$2.00		
BASE POINTS: Spokane, Moses Lake, Pasco, and Lewiston		
Zone 1: 0-45 radius miles from the main post office		
Zone 2: Over 45 radius miles from the main post office		

* PLAS0219B 01/01/2002		
	Rates	Fringes
AREA 2:		
CEMENT MASONS:		
ZONE 1		
GROUP 1	15.36	11.70
GROUP 2	15.56	11.70
CEMENT MASONS CLASSIFICATIONS		
GROUP 1: - JOURNEYMAN CEMENT MASON (including but not limited to hand chipping and patching, all types grouting and pointing of all concrete constructions, screed setting including screed pins, dry packing of all concrete including Embeco, plugging and filling all voids, etc., concrete construction, waterproofing of concrete with Thoroseal or similar materials.		
GROUP 2: - CEMENT MASON (magnesite terazzo and mastic composition, two component epoxies, Clary and similar type screed operator, sandblasting of concrete for architectural finished only, Power chipping and bushhammer, all color concrete work, Power Trowel Operator, Power Grinder Operator, Gunnite and Composition Floor Layer).		
Zone Differential (Add to Zone 1 rates): - \$1.00		

PLUM0044D 06/01/2001		
	Rates	Fringes
NEZ PERCE COUNTY		
PLUMBERS & PIPEFITTERS	29.61	9.14
BONNER, BOUNDARY, CLEARWATER, IDAHO(NORTHERN PART), KOOTENAI, LATH, LEWIS AND SHOSHONE COUNTIES		
PLUMBERS AND PIPEFITTERS	29.61	8.54

PLUM0296A 07/01/2001		
	Rates	Fringes
AREA 2:		
PLUMBERS AND PIPEFITTERS	23.54	7.77

* TEAM0483A 01/01/2002		
	Rates	Fringes
AREA 2: (Anyone working on HAZMAT jobs working with supplied air shall receive \$1.00 per hour above classification)		
THERE IS A HAZMAT CLASSIFICATION INCLUDED IN EACH GROUP		
TRUCK DRIVERS:		
ZONE 1		
GROUP 1	18.75	7.95
GROUP 2	19.00	7.95
GROUP 3	19.32	7.95
GROUP 4	19.50	7.95
GROUP 5		
CLASS A	19.32	7.95
B	19.50	7.95
C	19.73	7.95
D	20.24	7.95
E	20.47	7.95
F	20.91	7.95
Zone Differential (Add to Zone 1 Rate):		
Zone 2 - \$1.00		
TRUCK DRIVERS CLASSIFICATIONS		
GROUP 1: Leverman Loading at Bunkers; Pilot Car or Escort Driver Flat Bed-2 Axle and Pickup Hauling material; Water Truck (1,000 gallons and under); Ambulance Driver; Flat Bed-3 Axle; Fuel Truck (1,000 gallons and under); Greaser; Tireman; Serviceman; Buggymobile; Manhaul (Shuttle Truck or Bus)		
GROUP 2: Slurry or Concrete Pumping Truck; Flat Bed using Power Takeoff; Semi Trailer-Low Boy (up to 96,000 lbs. GVW); Bulk Cement Tanker (up to 96,000 lbs. GVW); Fork Lift (Bull Lift, Hydro Lift), Ross Hyster and similar Straddle equipment; "A" Frame Truck (Swedish Crane, Iowa 3,000 Hydro Lift); Transit Mix Truck (0-10 yds); Warehouseman Loading and Unloading		
GROUP 3: Water Tank Truck; Fuel Truck (over 1,000 gallons); Transit Mix Trucks (10 yards & over), Dumptors; Distributor or Spreader Truck; Field Tireman-Serviceman; Snow Plow (Truck Mounted); Warehouseman; Counterman, Shipping Receiving, Cardex.		
GROUP 4: Low Boy (96,000 lbs. GVW & over); Bulk Cement Tanker (96,000 lbs. GVW & over); Transit Mix Trucks (over 10 yards); Turnarocker & similar equipment; Warehouseman General		
GROUP 5:		

CLASS: A - Truck - Side, end and bottom dump, 0-16 yards, inclusive.
 B - Truck - Side, end and bottom dump, 16-30 yards, inclusive.
 C - Truck - Side, end and bottom dump, 30-50 yards, inclusive, and Truck Mechanic.
 D - Truck - Side, end and bottom dump, 50-75 yards, inclusive.
 E - Truck - Side, end and bottom dump, 75-100 yards inclusive.
 F - Truck - Side, end and bottom dump, over 100 yards.

 TEAM0690A 06/01/2000

	Rates	Fringes
AREA 1: (ANYONE WORKING ON HAZMAT JOBS SEE FOOTNOTE A BELOW)		
TRUCK DRIVERS:		
ZONE 1:		
GROUP 1	17.73	7.50
GROUP 2	20.00	7.50
GROUP 3	20.50	7.50
GROUP 4	20.83	7.50
GROUP 5	20.94	7.50
GROUP 6	21.11	7.50
GROUP 7	21.64	7.50
GROUP 8	21.97	7.50

Zone Differential (Add to Zone 1 rate): Zone 2 - \$2.00)

BASE POINTS: Spokane, Moses Lake, Pasco, Lewiston

Zone 1: 0-45 radius miles from the main post office

Zone 2: 45 radius miles and over from the main post office

TRUCK DRIVERS CLASSIFICATIONS

GROUP 1: Escort Driver or Pilot Car; Employee Haul; Power Boat Hauling Employees or Material

GROUP 2: Fish Truck; Flat Bed Truck; Fork Lift (3000 lbs. and under); Leverperson (loading trucks at bunkers); Trailer Mounted Hydro Seeder and Mulcher; Seeder & Mulcher; Stationary Fuel Operator; Tractor (small, rubber-tired, pulling trailer or similar equipment)

GROUP 3: Auto Crane (2000 lbs. capacity); Buggy Mobile & Similar; Bulk Cement Tanks & Spreader; Dumptor (6 yds. & under); Flat Bed Truck with Hydraulic System; Fork Lift (3001-16,000 lbs.); Fuel Truck Driver; Steamcleaner & Washer; Power Operated Sweeper; Rubber-tired Tunnel Jumbo; Scissors Truck; Slurry Truck Driver; Straddle Carrier (Ross, Hyster, & similar); Tireperson; Transit Mixers & Truck Hauling Concrete (3 yd. to & including 6 yds.); Trucks, side, end, bottom & articulated end dump (3 yards to and including 6 yards); Warehouseperson (to include shipping & receiving); Wrecker & Tow Truck

GROUP 4: A-Frame; Burner, Cutter, & Welder; Service Greaser; Trucks, side, end, bottom & articulated end dump (over 6 yds. to & including 12 yds.); Truck Mounted Hydro Seeder; Warehouseperson; Water Tank Truck (0-8000 gallons)

GROUP 5: Dumptor (over 6 yds.); Lowboy (50 tons & under); Self-loading Roll Off; Semi-Truck & Trailer; Tractor with Steer Trailer; Transit Mixers and Trucks Hauling Concrete (over 6 yds. to and including 10 yds.); Trucks, side, end, bottom &

articulated end dump (over 12 yds. to & including 20 yds.); Truck-Mounted Crane (with load bearing surface either mounted or pulled), up to 14 ton; Vacuum truck (super sucker, guzzler, etc.); Water Tank Truck (8,001-14,000 gallons)

GROUP 6: Flaherty Spreader Box Driver; Flowboys; Fork Lift (over 16,000 lbs.); Dumps (Semi-end); Lowboy (over 50 tons); Mechanic (Field); Transfer Truck & Trailer; Transit Mixers & Trucks Hauling Concrete (over 10 yds. to & including 20 yds.); Trucks, side, end, bottom & articulated end dump (over 20 yds. to & including 40 yds.); Truck and Pup; Tournarocker, DW's & similar, with 2 or more 4 wheel-power tractor with trailer, gallonage or yardage scale, whichever is greater; Water Tank Truck (8001-14,000 gallons)

GROUP 7: Oil Distributor Driver; Stringer Truck (cable operated trailer); Transit Mixers & Trucks Hauling Concrete (over 20 yds.); Truck, side, end, bottom & articulated end dump (over 40 yds. to & including 100 yds.); Truck mounted Crane (with load bearing surface either mounted or pulled (16 through 25 tons)

GROUP 8: Prime Movers & Stinger Truck; Trucks, side, end, bottom and articulated end dump (over 100 yds.);

Helicopter Pilot Hauling Employees or Materials

FOOTNOTE A - Anyone working on a HAZMAT job, where HAZMAT certification is required, shall be compensated as a premium, in addition to the classification working in as follows:

LEVEL C-D: - \$.50 PER HOUR - This is the lowest level of protection. This level may use an air purifying respirator or additional protective clothing.

LEVEL A-B: - \$1.00 PER HOUR - Uses supplied air in conjunction with a chemical splash suit or fully encapsulated suit with self-contained breathing apparatus.

NOTE: Trucks Pulling Equipment Trailers: shall receive \$.15/hour over applicable truck rate

ZONE DEFINITIONS

AREA 2

(If a project is located in more than one zone the lower zone rate shall apply)

Zone 1: That area within the State of Idaho located within 30 miles on either side of I-84 from the Oregon-Idaho State Line on the West to the Intersection of I-84 and I-86 in Cassia County, then following I-86 to Pocatello, then following I-15 to Idaho Falls, then following State Highway #20 - 10 miles north to the intersection with Moody Road then following I-15 south from the city of Pocatello to a point 10 miles South of the Southern Boundary of Bannock County extended to the West.

Zone 2: The remaining area of that portion of the State of Idaho south of Parallel 46 (the Washington-Oregon State Line extended eastward to Montana) that is not included in Zone 1 as described above.

AREA DEFINITIONS

(APPLIES TO ALL CRAFTS)

AREA 1:

Benewah, Bonner, Boundary, Clearwater, Idaho (North of the 46th Parallel), Kootenai, Latah, Lewis, Nez Perce, and Shoshone Counties.

AREA 2:

Ada, Adams, Bannock, Bear Lake, Bingham, Blaine, Boise, Butte,

Bonneville, Camas, Canyon, Caribou, Cassia, Clark, Custer, Elmore, Franklin, Fremont, Gem, Gooding, Idaho (South of the 46th Parallel), Jefferson, Jerome, Lemhi, Lincoln, Madison, Minidoka, Oneida, Owyhee, Payette, Power, Teton, Twin Falls, Valley, and Washington Counties.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.
=====

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(v)).

In the listing above, the "SU" designation means that rates listed under that identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review

Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board

U. S. Department of Labor

200 Constitution Avenue, N. W.

Washington, D. C. 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

SECTION 01010

CONTRACTOR'S SITE OPERATIONS

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SECTION 01010

CONTRACTOR'S SITE OPERATIONS

PART 1 GENERAL

1.1 GENERAL INFORMATION

This section covers the general requirements applicable to specific Contractor's operations or equipment for work performed on site.

1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referenced to in the text by basic definition only.

CODE OF FEDERAL REGULATIONS (CFR)

29 CFR 1910 (1997) Occupational Safety and Health Standards

29 CFR 1926 (1992) Safety and Health Regulations for Construction

FEDERAL HIGHWAY ADMINISTRATION (FHWA)

FHWA (1988) Manual on Traffic Control Devices For Streets and Highways

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1 (1996) Safety and Health Requirements Manual

1.3 SUBMITTALS

Submittals required by this section of the Technical Specifications shall be for Government approval (GA) or for information only (FIO), and shall be submitted as stated below in accordance with Section 01330 SUBMITTAL OF CONTRACT DATA. The time of submittal shall be in accordance with Section 01330 SUBMITTAL OF CONTRACT DATA, unless otherwise indicated below.

SD-09 Reports

Weekly Coordination Meeting Minutes; F10

Minutes of weekly coordination meetings within 3 working days of the meeting, para. 1.26.

Contractor's Work Supervisors(s) Qualifications; FIO

Qualifications and identification of Contractor's work supervisor(s), a minimum of 30 calendar days prior to the start of site work, para. 1.16.1.

Crane Operator(s) Qualifications; FIO

Crane operators qualifications, a minimum of 30 calendar days prior to the start of site work, para. 1.10.2.

1.4 WORK AREAS AND ACCESS

1.4.1 Access Roads, General

No new access roads are required. Contractor-caused damage to existing roadways or Project grounds used for access purposes shall be repaired and the surface shall be restored to its pre-damaged condition less normal wear. The Contractor shall comply with all requirements of the State and County authorities for use of existing roadways, such as traffic regulations, load limits, etc.

1.4.2 Access By Government Personnel

Clear access shall be maintained for Government personnel and equipment through all work areas.

1.4.3 Contractor's Staging Area and Employee Access

The job-site office may be in the staging area. The project areas off-limits to Contractor personnel will also be designated. Salespersons or personnel seeking employment will not be permitted inside the powerhouse. Signs may be erected outside the powerhouse containing instructions for personnel seeking the Contractor. The content and location of the signs shall be approved by the Government Quality Assurance Representative GQAR prior to erection.

1.5 VEHICLES

Parking of private vehicles shall be restricted to the areas designated by the Government. All Contractor's vehicles shall display permanent identification of such size and color to allow Government personnel to identify the vehicle.

1.6 SANITATION FACILITIES

Task orders requiring work at a project site will indicate the availability of sanitation facilities for use by Contractor personnel. When it is necessary for the Contractor to provide his own sanitation facilities the facilities furnished by the Contractor shall be in accordance with EM 385-1-1. Contractor supplied sanitation facilities shall be located outside the powerhouse at locations coordinated with and approved by the GQAR and shall be provided with freeze protection during the months October through March to prevent any spillage.

1.7 UTILITIES

1.7.1 Government Furnished Utilities

Task orders requiring work at a project site will indicate the availability of utilities for use by Contractor personnel. When Government furnishes utilities are used by the Contractor the requirements stated herein shall apply unless noted otherwise in the task order:

a. Water.

All reasonable amounts of non-potable water will be made available from existing outlets. Contractor shall provide all necessary potable water. Contractor shall freeze proof all outdoor water systems being used in his operations during the winter months; October through March.

b. Electricity and Compressed Air.

Electric power, 120/240 VAC, single phase, 480VAC, three phase and 100 psig compressed air may be obtained from existing sources by coordinating with the GQAR.

1.7.2 Temporary Utility Connections

All utilities provided by the Government shall be at no cost. Care shall be exercised in conserving all Government-furnished utilities. Extension cords shall be Contractor-furnished. All temporary utility connections shall be subject to approval. The location of all power lines and all temporary connections for electricity shall be coordinated with the GQAR. All temporary circuits and devices shall be provided, connected, and maintained and removed prior to final acceptance. Ground fault protection for all circuits used shall be Contractor-furnished.

1.7.3 Telephone

The Contractor shall be responsible for having the telephone company furnish all telephone service needed by him on the job site. The Contractor will be allowed to utilize a dedicated line at the Project telephone switch. All connections, hardware and service charges for telephone service shall be the responsibility and expense of the Contractor. The Project telephone system will not be available to the Contractor. Cellular phones may be used. Individual task orders may provide additional information concerning project specific telephone system requirements.

1.8 SAFE CLEARANCE PROCEDURES

A Safe Clearance System, as stated in ER-385-1-1 and amended by the Project, is used by project personnel to insure continuity of service and safety to personnel and equipment. Any task order which requires taking project operating equipment out of service will be done only after a formal clearance is obtained by the GQAR with 48-hour minimum notice. Clearance shall not be violated by Contractor personnel. Any violation of Safe Clearance Procedures will be grounds for removal of the offender(s). The Contractor shall assure that all of its employees have the appropriate personal safety equipment, as required. A copy of the Project specific Safe Clearance Procedures and Requirements will be supplied to the Contractor with each task order requiring work in a powerhouse.

1.9 DAILY CLEANUP AND DISPOSAL

In conjunction with SECTIONS 01350, work areas shall be kept reasonably neat on a daily basis. All debris resulting from the work, shall be collected, removed, and disposed of off-site at least once per week. The Government's trash cans, dump boxes and other containers shall not be used. Liquid waste shall not be disposed of in powerhouse drains.

1.10 USE OF POWERHOUSE BRIDGE CRANES

1.10.1 General

The Government's bridge cranes within the powerhouse will be available for the work within the working load and movement limits of the cranes. The bridge cranes will be available for use by the Contractor at such times as not required for other maintenance and repair work performed by Government personnel. The Government will furnish electric power, lubrication, and normal maintenance including adjustments without cost to the Contractor. The Contractor shall give the Government at least 24 hours notice in advance each time he desires use of the cranes on weekdays and 48 hours notice for use on weekends and Federal holidays. The Government retains the right to withdraw the availability of the cranes at any time it is required for emergency use, normally scheduled project maintenance, or for coordination with other contractors.

1.10.2 Crane Operators

The Contractor shall furnish qualified bridge crane operators for his operations. Each operator in addition to meeting the requirements of EM 385-1-1 shall have had at least 1 year experience on a bridge crane of equivalent capacity and characteristics. Qualifications for each operator in the form of an affidavit signed by the operator and the Contractor shall be furnished in duplicate. The affidavit shall include a complete record of all related work with particular emphasis on experience directly related to operation of a bridge crane handling comparable loads. Before any operator is approved he shall spend at least 1 hour in being checked out on the cranes under the direct surveillance of a Government operator. The operators may be retested at any time. The Contractor shall insure that the crane operators have current (within the previous 12 months) physical or medical examinations with emphasis on hearing, eyesight, and cardiovascular conditions. Dates of physical exams shall be submitted to the Contracting Officer.

1.10.3 Use of the Cranes

The crane facilities at the project must be shared with the Corps project forces and other contractors as directed by the Contracting Officer. The Contractor will be liable for all damage, due to fault or negligence, incurred while the cranes are operated by the Contractors crane operators. The Contracting Officer will make allocation of crane time between the different contractors, and his decision will be final in any dispute arising relative thereto. Crane capacity is plant specific and crane hoist load limits are not to be exceeded.

1.10.4 Riggers

Only qualified riggers shall be used in preparing loads for lifting and in attaching such loads to the cranes. A Government operator will check them for knowledge of hand signals. Hand held portable radios may be used but only on non-Government frequencies.

1.11 CONTRACTOR'S EQUIPMENT AND MATERIAL

The planned method of transportation and operation of Contractor heavy equipment to be used in the performance of this contract shall be coordinated with the GQAR. This shall include the type, size, and loading of equipment and the proposed transportation routes and work areas to be used on the project. Operation of heavy equipment adjacent to existing structures shall be avoided when possible.

1.12 DAMAGED EQUIPMENT OR ABNORMAL CONDITIONS

The GQAR shall be informed immediately upon finding any damaged equipment or other abnormal conditions involving additional work in which the Contractor believes he has no responsibility. The failure or abnormality shall not be disturbed until witnessed. Any damage or abnormal conditions not reported as specified above but discovered at a later date, shall be corrected at the Contractor's expense.

1.13 PROTECTION OF MATERIAL AND WORK

Materials, supplies, tools, equipment and Government property (including all tools, equipment, and special devices supplied by the Contractor and to be turned over to the Government at the end of the Contract) shall be protected and preserved in accordance with manufacturer's recommendations. If material, equipment, supplies, and work performed are not adequately protected, such property may be protected by the Government and the cost thereof will be charged to the Contractor or deducted from any payment due. Protection of the powerhouse floors and walls (concrete and tile) shall be provided and maintained by the Contractor. Plywood, 3/4 inch thick minimum and visqueen 5 mil thick minimum shall protect the powerhouse floors under all stored materials, supplies, tools, and equipment unless approved by the GQAR. Any floors damaged or stained shall be repaired or replaced by the Contractor. The Contractor is responsible for the removal of all stains and residues, and the repair of damage to structures and equipment caused by this work. Operating components of existing powerhouse equipment shall be protected.

1.14 GAS, VAPOR, FUME, DUST, AND MIST CONTROL IN POWERHOUSE

All necessary measures shall be taken to effect maximum control of all gases, vapors, fumes, dusts and mists created by Contractor operations under this contract. To the maximum extent possible, all dust and dirt shall be removed by vacuum cleaning, unless otherwise directed by the GQAR. The required Control program shall include the following:

a. Provision of exhaust ducts which shall discharge outside the powerhouse structure where mechanical ventilation is used. Ventilation systems shall comply with requirements of 29 CFR 1910.94 and 29 CFR 1926.57.

- b. Controlled operation of power-driven tools.
- c. Furnishing and removing of approved dust preventatives in areas which cannot be properly rendered free from excessive dusting by vacuum cleaning or other methods.
- d. Vacuum cleaning (or other acceptable method) of spaces within the powerhouse where dust accumulates.
- e. Only air, electrical, propane, or battery-driven equipment may be used inside the powerhouse.
- f. The powerhouse is pressurized to prevent dust infiltration from the outside. All doors shall be kept closed when not being used.
- g. Methods to prevent exposure of employees to inhalation, ingestion, skin absorption, or contact with any material or substance at concentrations above those specified in 29 CFR 1910.1000, 29 CFR 1926.55 and .58.

1.15 DRAWINGS AND MANUALS

As-built drawings and manuals required for the work and not provided herein will be provided with the individual task orders.

1.16 CONTRACTOR'S WORK SUPERVISOR AND PERSONNEL

1.16.1 Contractor's Work Supervisor(s)

At least one (1) full-time employee of the Contractor shall be available at the worksite anytime other Contractor or subcontractor personnel are working on the site to supervise and direct the work specified herein. Supervisor(s) shall be present at the site during erection and shall be responsible for providing complete and correct direction of all installation work, the initial starting, and all subsequent operation of the equipment until the field tests are completed. The supervisor(s) shall be responsible for following the Government's Safe Clearance Procedure, para. 1.8. The supervisor(s) shall initiate instructions for all actions necessary for the proper inspection, handling, assembly and testing of the equipment. The supervisor(s) shall keep a daily record of all work accomplished and all measurements taken during erection and shall provide copies on request or on completion of installation of the equipment associated with one generating unit. The supervisor(s) shall keep all as-built drawings current and provide copies upon completion of the work. The supervisor(s) shall report immediately in writing to the Contracting Officer any work not in accordance with the manufacturer's recommendation or any special conditions which may result in an unsatisfactory job. The supervisor(s) shall be fluent in the spoken and written English language. The supervisor(s) shall be qualified to supervise the installation, preparation, and testing of the system, perform field tests as is specified herein. The Supervisors qualifications, experience, a verifying contact, name and phone number, shall be submitted for at least two such facilities.

1.16.2 Contractor's General Personnel

1.16.2.1 General

The Contractor shall prepare, and revise whenever organizational changes occur, a project organization chart reflecting at least those positions described herein and defining their work relationships, etc. The Contractor shall maintain a complete organizational chart of all positions that will be working on the project. All personnel employed by the Contractor shall be fully qualified in their respective fields to render the services necessary. The Contractor's organizational plan shall be maintained in the CQC Plan and submitted upon request by the GQAR.

1.16.2.2 Identification of Contractor's Employees

The Contractor shall be responsible for furnishing to each employee at the powerhouse and for requiring each employee at the powerhouse to display such identification as approved and specified below. All Contractor personnel, prior to engaging in work on project premises, shall either be issued an identification card by the Contractor or agree to provide their driver's license as I.D. upon request. If the Contractor so decides to furnish I.D. cards to all employees, the card must include the following information:

- Name of Contractor
- Name of Employee
- Birth date
- Weight
- Hair color
- Eye color
- Recent photo

All prescribed identifications shall be returned immediately to the Contractor upon release of any employee. The Contractor shall submit a complete listing of all personnel and their titles who will be working on the project at the weekly Coordination Meeting. This listing shall be revised and resubmitted when personnel changes occur. When required by the Government, the Contractor shall obtain and submit fingerprints of all persons employed to work at the powerhouse.

1.17 TEMPORARY FACILITIES

Temporary facilities provided during Construction shall be removed prior to final payment.

1.18 PROTECTION AND RESTORATION OF EXISTING FACILITIES

All existing facilities shall be protected whether or not shown on the drawings. Upon completion of the work, all the existing facilities, not included as a portion of the work, shall be left in a condition equal to the original condition prior to the contract. Costs for repair and restoration of any facilities shall be considered to be incidental to and included in the contract price.

1.19 CARE OF DRAINS

Existing powerhouse floor drains including the unwatering drains and transformer cell drains shall not be used for disposal of any solid material or any liquids other than clear water. Drains

obstructed by the Contractor shall be cleaned by the Contractor. All costs incurred in the cleaning and clearing of plugged drains, shall be borne by the Contractor.

1.20 WORK BY THE GOVERNMENT CONCURRENT WITH CONTRACTOR WORK

The Government will limit interference with the Contractor's work to the maximum reasonable extent and the Government and Contractor shall coordinate as necessary.

1.21 SCAFFOLDING

The Contractor shall furnish and install all necessary scaffolding. Approved antislip surface material shall be installed on scaffolding platforms. Scaffolding shall comply in every respect with EM 385-1-1. Any scaffolding, ladder, stairway, or other access schemes proposed to be used which is not covered in or not in compliance with EM 385-1-1 shall be coordinated with and approved by the GQAR.

1.22 NOISE CONTROL

Noise control and noise levels shall conform to requirements set forth in the appropriate regulations, including EM 385-1-1, Section 05.C, 29 CFR 1910.95, 29 CFR 1926.52 and .101. The most conservative requirement shall Govern.

1.23 FIRE CONTROL

All fire fighting equipment, supplies, and personnel shall be supplied by the Contractor in accordance with EM-385-1-1, Section 09, 29 CFR 1910 SUBPART L and 29 CFR 1926 SUBPART F.

1.24 BARRICADES AND DANGER, DETOUR AND WARNING SIGNS

1.24.1 Barricades, and Danger and Detour signs

The Contractor shall provide, erect, and maintain all necessary barricades, suitable and sufficient red lights, danger signals, and detour and other signs; provide a sufficient number of watchmen; and take all necessary precautions for the protection of the work and the safety of the public. Powerhouse galleries, floors, project roads, etc. obstructed or closed to traffic shall be protected by effective barricades. Obstructions shall be continuously illuminated day and night. Suitable warning signs shall be illuminated by lanterns or flares day and night. The signs, signals and barricades shall comply with EM 385-1-1 SECTION 08, 29 CFR 1910.145 and 29 CFR 1926 SUBPART G.

1.24.2 Warning Signs

Warning signs shall be erected 500 feet in advance of any place on the project where operations interfere with the use of a road by traffic. Warning signs shall conform to the standards established in Part IV of the "Manual on Uniform Traffic Control Devices for Streets and Highways".

1.25 SITE WORKING HOURS

1.25.1 Government Project Personnel Working Hours

The scheduled working hours for Project personnel are generally Mondays through Thursdays from 6:30 a.m. until 5:00 p.m., excluding holidays. Fridays, Saturdays and Sundays are non-work days. Project support required by the Contractor may be scheduled other than Project working hours but must be coordinated with and approved by the Government. For each task order issued the scheduled working hours at the applicable Project will be provided.

1.25.2 Contractor's Working Hours

The schedule of work hours, shifts, and days of the week shall be coordinated with the GQAR. Notification of any proposed changes of the schedule of regular work hours, overtime work hours, and shifts of work crews and personnel at the site shall be coordinated with the GQAR.

1.26 WEEKLY COORDINATION MEETINGS

Once each week a coordination meeting will be held between the Contractor and the Government. This meeting will be used to discuss the Contractor's proposed schedule, actual progress in the last week and work planned in the up coming week. A meeting time and place shall be mutually agreed upon. The Contractor shall submit minutes of the meetings within three working days, for review and acceptance by the GQAR.

1.27 PERMITS AND RESPONSIBILITIES

The Contractor shall, without additional expense to the Government, be responsible for obtaining any necessary licenses and permits, and for complying with any Federal, State, and municipal laws, codes, and regulations applicable to the performance of the work. The Contractor shall also be responsible for all damages to persons or property that occur as a result of the Contractor's fault or negligence, and shall take proper safety and health precautions to protect the work, the workers, the public, and property of others. The Contractor shall also be responsible for all materials delivered and work performed until completion and acceptance of the entire work, except for any completed unit of work which may have been accepted under the contract.

1.28 COMPLIANCE WITH DAVIS-BACON ACT

1.28.1 Contractor POC

Within 14 days after award of a task order, the Contractor shall designate a point of contact (POC) within their organization who will be responsible for the Davis-Bacon Act Labor Program for the Contractor and all subcontractors under this contract as required by the Contract Clauses and FAR 52.222.

1.28.2 Responsibilities

The designated Contractor POC shall be responsible for Davis-Bacon Act Labor Program activities including, but not limited to:

Documentation and record keeping

Submittal and accuracy of certified payrolls

Submittal of required labor forms including requests for additional classifications and rates, Statements and Acknowledgement, etc.

Posting of the wage determination, approved additional classifications and rates, labor and EEO posters

Coordination with the Contracting Officer's Labor Program POC

Prior to submittal to the Government, payrolls shall be reviewed for compliance to all applicable labor standards, to include, but not be limited to the following items: correct wage rates, correct overtime classification and pay, misclassification of workers for work actually performed, apprentice to journeyman ratios, and registration of apprentice. Corrective actions shall be taken as necessary to ensure Contractor compliance with applicable contract and FAR clauses.

1.28.3 Certification

The Contractor POC shall provide a signed certification stating the following: "I certify that the submitted items being forwarded have been reviewed in detail and are correct and in strict conformance with the Labor Standards of the contract except as otherwise stated."

SECTION 01270

PAYMENT

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(NOT USED)

PART 3 EXECUTION

(NOT USED)

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SECTION 01270

PAYMENT

PART 1 GENERAL

1.1 GENERAL INFORMATION

In each instance, the contract price for an item will constitute full compensation as herein specified, as shown, or as otherwise approved. The contract price and payment will also constitute full compensation for all work incidental to completion of the item, unless such work is otherwise specifically mentioned for separate payment under another bid item. In the event any work is required by the specification sections or by the drawings and not specifically mentioned in the payment paragraphs, separate or direct payment will not be made, and all costs thereof are incidental to, and included in, the items listed in the bid schedule. No separate payment will be made for the work, services, or operations required by the Contractor, as specified in DIVISION 1, GENERAL REQUIREMENTS, to complete the project in accordance with these specifications; all costs thereof shall be considered as incidental to the work.

1.2 PAYMENT

1.2.1 SCHEDULE ITEMS *****AA - All work for Design and Development of SF6 Retrofit Breakers for(specified location).

Payment will be made at the contract lump sum price for Schedule Item No. *****AA, All work for Design and Development of SF6 Retrofit Breakers for the specified location. Price and payment shall constitute full compensation for all labor, materials, and equipment required for Design and Development of SF6 Retrofit Breakers for the specified location. Operation and Maintenance Manuals (see Section 01782 Operation and Maintenance Data) for the SF6 Retrofit Breakers developed for the specified location shall be supplied under this Schedule Item. One set of Tools and Accessories (see Section 16353, Paragraph 2.19 Tool and Accessories) for the SF6 Retrofit Breakers developed for the specified location shall also be supplied under this Schedule Item. Payment for the work under this Schedule Item for a specified location will be paid for once during the 5 year contract period. One or more Retrofit Breaker Assemblies (Schedule Items *****AB) for the specified location will be ordered following successful completion of the Design and Development of this Schedule Item. Payment will be the contract Schedule Amount as appropriate for the year in which the task order for the schedule item is issued.

1.2.2 SCHEDULE ITEMS *****AB All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Designed and Developed in Item *****AA, for(specified location).

Payment will be made at the contract unit price for Schedule Item No. *****AB, All Work to Fabricate and Deliver a SF6 Retrofit Breaker Assembly, as Designed and Developed in Schedule Item *****AA, for(specified location). Payment shall constitute full compensation for all labor, materials, equipment and transportation required to fabricate and deliver the number of SF6 Retrofit Breaker Assemblies ordered for the specified location, complete. Payment will be based on the contract schedule unit price as appropriate for the year in which the task order for the schedule item is issued.

1.2.3 SCHEDULE ITEMS *****AC All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item *****AB, in place complete.

Payment will be made at the contract unit price for Schedule Item No. *****AC, All Work for Installation of a SF6 Retrofit Breaker Assembly, as Furnished in Item *****AB, in place complete. Payment shall constitute full compensation for all labor, materials, and equipment required for removal of existing equipment, conduit, and wiring; and the complete design and installation of power and control wiring, and alarm circuits, relaying, miscellaneous electrical accessories and field testing of a complete retrofit circuit breaker, in place complete. Payment will be based on the contract schedule unit price as appropriate for the year in which the task order for the schedule item is issued.

1.2.4 SCHEDULE ITEMS *****AD All Work to Fabricate and Deliver a Set of Spare Parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item *****AB.

Payment will be made at the contract unit price for Schedule Item No. *****AD, All Work to Fabricate and Deliver a Set of Spare Parts for a SF6 Retrofit Breaker Assembly, as Furnished in Item *****AB. Payment shall constitute full compensation for all labor, materials, equipment and transportation required to fabricate and deliver the spare parts as specified in Specification Section 16353 for the SF6 Retrofit Breaker Assembly(ies) ordered for the specified location, complete. Payment will be based on the contract schedule unit price as appropriate for the year in which the task order for the schedule item is issued.

1.2.5 SCHEDULE ITEMS *****AE All Work to Provide One Week of Training for Government Personnel at the(specified) Power House.

Payment will be made at the contract unit price for Schedule Item No. *****AE, All Work to Provide One Week of Training for Government Personnel at the(specified) Power House. Payment shall constitute full compensation for all labor, materials, equipment and transportation required to provide training as specified in Specification Section 16353 for the Government personnel responsible for the operation and maintenance of the equipment provided in this contract. Payment will be based on the contract schedule unit price as appropriate for the year in which the task order for the schedule item is issued.

1.2.6 SCHEDULE ITEM0013 (BASE AND OPTION PERIODS) - NON-PREPRICED ITEM ALLOWANCE

A lump sum allowance is included in the SCHEDULE (Section B) for the BASE PERIOD and each OPTION PERIOD for related construction work at any of the specified locations or at a different site to provide for performing work not otherwise covered under one of the prepriced items in the Schedule. This allowance, up to the not to exceed limits for the respective contract period, will be available to the Government to award one or more additional retrofit breakers and will include the respective materials, labor and equipment costs associated with the work. This non-prepriced work allowance shall only be used with prior authorization from the Contracting Officer. No payment will be made under the "NON-PREPRICED ITEM ALLOWANCE" for any materials, equipment, supplies, labor, and incidentals for which payment is to be included under a prepriced item. The Government may request work to be performed under this "NON-

00035

Main Unit Circuit Breaker Replacement, Various Sites

PREPRICED ITEM ALLOWANCE" by including non-prepriced work and prepriced work in a single task order or by issuing a separate task order RFP for non-prepriced work.

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PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

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SECTION 01310

PROJECT MANAGEMENT

PART 1 GENERAL

1.1 GENERAL INFORMATION

The Contractor shall furnish the services of professionally trained personnel, under the terms and conditions set forth in the contract and the individual Task Order. The types of disciplines required will include, but not be limited to, Program Manager, Project Managers, Schedulers, Site Superintendents, Technicians, Equipment Operators, Electricians, Mechanics, Laborers, Millwrights, and Clerical. Engineering technical support may require the following disciplines:

Electrical, and Mechanical Engineers.

1.2 PERSONNEL REQUIREMENTS

1.2.1 Program Manager.

The Program Manager shall be the single point of contact for the entire program. The Program Manager shall ensure the successful and efficient use of the ID/IQ Contract. The Program Manager shall be competent, experienced and knowledgeable in management of electrical breaker systems and repairs and the specific activities identified in this contract. The Program Manager shall be dedicated to the program for the life of the contract. The Program Manager shall not be replaced except for cause. If replaced, any person proposed for the Program Manager or any replacement must be approved in writing by the Contracting Officer.

1.2.1.1 Program Manager Qualifications

The Program Manager shall have, as a minimum, the following qualifications:

- (a) A college degree or equivalent experience in an engineering related field, construction management, or other related field.
- (b) A minimum of five (5) years experience in project management.
- (c) The proven ability to effectively communicate and manage customer expectations.
- (d) The proven ability to locate, coordinate, and utilize resources within their own organization.
- (e) Work experience with the proven ability to effectively manage subcontracts.

1.2.1.2 Program Manager Responsibilities.

Specific Program Manager responsibilities include but are not limited to the following:

- (a) Maintaining close communication and coordination with the Government. Reporting any and all problems encountered in performing task orders. Implementing any special procedures specified by the Government. As part of this close communication, the Program Manager shall attend up to three "Report Card Meetings" a year either at the Contractor's main office or at the District office utilizing this Contract. The purpose of this meeting is to evaluate the progress of each active task order, problem incurred, and policy or procedural changes. The Program Manager shall attend site visits when appropriate.
- (b) Retaining and managing the distribution of personnel, equipment, and materials so that all work is performed within the schedule specified for a task order.
- (c) Negotiating, receiving, acknowledging, approving, and implementing task orders issued by the Contracting Officer.
- (d) Designating a Project Manager for each separate task order to work directly with the Government and coordinating pre-task order planning for each response.
- (e) Taking immediate corrective action, when performance is not acceptable to the Government.
- (f) Maintaining an accounting of all costs incurred in accordance with Government cost procedures, other reporting requirements, and controlling costs at all levels of work.
- (g) Developing procedures and forms as necessary to ensure uniform record keeping and program management documentation.
- (h) Initiating a property administration program to manage Government- owned property acquired or operated by the contractor under this contract.
- (i) Developing, implementing, and managing a quality control program that will ensure that all factory product and installation quality measures are obtained.
- (j) Implementing a comprehensive safety program.

1.2.2 Task Manager

For each task order issued to the contractor, the contractor shall designate a Task Manager (TM). The TM shall be the single point of contact for the task order, and shall be responsible for the management and execution of all activities in exact accordance with the requirements of the task order.

1.2.2.1 Task Manager Qualifications

The Task Manager shall have, as a minimum, the following qualifications:

- (a) A minimum of two (2) years experience in project management.
- (b) A knowledge of applicable Federal, state, and local laws and regulations.
- (c) The ability to effectively communicate and manage customer expectations.

(d) The ability to locate, coordinate, and utilize resources within their own organization.

(e) Work experience with the proven ability to effectively manage subcontracts.

1.2.2.2 Task Manager Responsibilities

Specific Task Management responsibilities include but are not limited to the following:

(a) Site visit with the Government prior to task order award to plan and coordinate the work.

(b) Maintaining close communication and coordination with Government for the duration of the project, including reporting of any and all problems encountered.

(c) Ensuring that all task order requirements are met.

(d) Providing administrative support, supervision, and management of all contractor personnel, equipment, and materials. This will ensure that all directives issued by the Government are executed in an acceptable manner.

(e) Ensuring that all Quality Control Standards required by the Government are met as specified by this contract and the task order.

(f) Providing the Government with a detailed reporting of all costs incurred under the task order.

(g) Implementing a comprehensive response action safety plan to protect all contractor personnel, including both the prime and subcontractors.

(h) Assure all aspects of task orders are completed to the satisfaction of the Government.

1.2.3 Work Site Supervisor

For each task order issued to the Contractor which requires site work, the Contractor shall designate a Work Site Supervisor.

1.2.3.1 Work Site Supervisor Qualifications

The work site supervisor shall have, as a minimum, the following qualifications:

(a) The ability and authority to supervise all site work activities involved in completing the task order.

(b) The technical knowledge in all portions of the site work involved in completing the task order.

(c) knowledge of applicable Federal, state, and local laws and regulations.

(d) The ability to effectively communicate and manage customer expectations.

(e) The ability to locate, coordinate, and utilize resources within their own organization.

(f) Work experience with the proven ability to effectively manage subcontracts.

1.2.3.2 Work Site Supervisor Responsibilities

Specific Work Site Supervisor responsibilities include but are not limited to the following:

(a) Being present at the site during all stages of the site work.

(b) Maintaining close communication and coordination with Government for the duration of the site work, including reporting of any and all problems encountered.

(c) Ensuring that all site work is performed per task order requirements.

(d) Preparing daily logs of the accomplished work.

(e) The work site supervisor must be on site from job start to job finish unless otherwise approved by COR. Failure to do this will result in poor performance rating.

1.2.4 Other Personnel Qualifications

The qualifications for all other personnel will be specified under each task order.

1.2.5 Dismissal

The Government may require the Contractor to dismiss from the contract work such employees as it deems incompetent, careless, insubordinate, or whose continued employment is deemed adverse to the public, or Corps of Engineers' interest. This requirement shall not be the basis for any claim for compensation or damages against the United States or any of its officers or agents.

1.3 CONTRACTING OFFICER'S REPRESENTATIVE.

The Government will designate Contracting Officers Representatives (CORs) who will provide all liaison, supply Government furnished data, provide and confirm all decisions relative to Contractor's work or questions, forward minutes of conferences, meetings, and other necessary documents. Contractor interpretations and associated guidance/direction by the Government shall not be official unless specifically provided by the Contracting officer or by the CORs. The CORs will be responsible for monitoring the timely progress of the Contractor's work and its satisfactory completion, and will be assisted by others, as may be necessary.

1.4 ADMINISTRATIVE CONTRACTING OFFICER.

The Contracting officer may designate an Administrative Contracting Officer (ACO) for a specific task order. ACO delegation will occur on a limited basis, usually for task orders that are for construction.

PART 2 PRODUCTS AND PART 3 EXECUTION - (NOT USED)

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SECTION 01330

SUBMITTAL OF CONTRACT DATA

PART 1 GENERAL

1.1 CONTRACT DATA REQUIREMENTS LIST AND SUBITTAL COORDINATION MEETING

The Contractor shall submit all items listed on the Contract Data Requirements List (CDRL) (DD Form 1423) included as an attachment under Section J ATTACHMENTS. Submittals required in the CONTRACT CLAUSES and various submittals concerning the Contractor's operations are in addition to those listed. After contract award, and before any submittals are sent to the Contracting Officer's Representative, the Contractor shall meet with the Contracting Officer's Representative and develop an approved preliminary submittal register, ENG Form 4288. Submittals are identified as being either Basic Contract Submittals or Task Order Specific Submittals. The following paragraphs further explain this. In addition, whenever major items of equipment are replaced or repaired, the Contracting Officer may require the submittal of "product data," "shop drawings," "samples," or other "administrative submittals," conforming to the requirements of this Section.

1.2 SUBMITTAL CLASSIFICATION

Submittals are generally identified in the technical specifications with submittal description (SD) numbers and are classified as follows:

1.2.1 Government Approved

Governmental approval is required for extensions of design, critical materials, deviations, equipment whose compatibility with the entire system must be checked, and other items as designated by the Contracting Officer. Within the terms of the Contract Clause entitled "Specifications and Drawings for Construction," they are considered to be "shop drawings."

1.2.2 Information Only

All submittals not requiring Government approval will be for information only. They are not considered to be "shop drawings" within the terms of the Contract Clause referred to above.

1.3 SUBMITTAL DESCRIPTIONS

See Attachment A at the end of this Section for a description of the contract submittal descriptions.

1.4 SUBMITTAL PHASE

Submittals are required for basic contract requirements (non task order specific) and for task order specific requirements as follows:

1.4.1 Basic Contract Submittals

Basic Contract Submittals cover general work requirements and information prior to issuing of any task orders. Within 30 days after contract award, the Contractor shall complete and submit to the Contracting Officer the Basic Contract Submittals. No on-site operations will be allowed prior to approval of the Basic Contract Submittals.

1.4.2 Task Order Submittals

All other submittals will be task order specific and such submittals as are required will be identified in each individual task order. The required submittals for each task order (which may be, in some cases, an addendum to the basic contract submittal) and in addition specific submittal requirements will be identified in the statement of work for a specific task order. Task Order specific submittals shall be available at time of negotiations and receive final approval prior to notice-to-proceed for the respective task order unless otherwise approved by the Contracting Officer.

1.5 EXISTING DRAWINGS

The Government will provide disks which have drawing files for all contract drawings which shall be used by the Contractor to create the Contractor's shop drawings. One complete set of computerized shop drawing files shall be prepared using Bentley Computer-Aided Design System. The files shall be suitable for use on a personnel computer running Microstation 95. Format compatibility must include, but not limited to 63 level assignments, color tables capable of supporting 256 colors, and capable of supporting 20 fonts. The Government will furnish a floppy disk containing the cell and font libraries and the standard border. The shop drawings shall have one drawing per disk, each disk labeled with the Contractor's drawing number.

1.6 SUBMITTAL REVIEW AND APPROVAL

Before submission, Contractor shall review all submittals prepared by subcontractors, suppliers, and himself, for completeness, accuracy, and compliance with plans and specifications. Contractor shall not use red markings on submittals. Red markings are reserved for use by the Contracting Officer. Approval by Contractor shall be indicated on each drawing by an "Approved" stamp with Contractor's name, signature, and date. The review shall be done by registered engineers in the appropriate disciplines. The reviews shall be thorough and complete and authenticated by registered engineer's or architect's stamp. This administration of submittal review must be integrated into the Contractor's Quality Control Plan. The plan must delineate in precise detail how the Contractor intends to satisfy this requirement. This should include names of organizations, qualifications and names of individuals who will be doing the work with their qualifications/resumes. Supplier's or subcontractors certifications are not acceptable as meeting this requirement of independent review. Submittals not conforming to the requirements of this section will be returned to the Contractor for correction and resubmittal.

1.7 GOVERNMENT APPROVED SUBMITTALS

The Contracting Officer's approval of submittals shall not be construed as a complete check, but will indicate only that the general method of construction, materials, detailing and other

information are satisfactory. Approval will not relieve the Contractor of the responsibility for any error which may exist, as the Contractor under the CQC requirements of this contract is responsible for the dimensions, the design of adequate connections and details, and the satisfactory construction of all work. After submittals have been approved by the Contracting Officer, no resubmittal for the purpose of substituting materials or equipment will be given consideration unless accompanied by an explanation of why a substitution is necessary.

1.8 DISAPPROVED SUBMITTALS

The Contractor shall make all corrections required by the Contracting Officer and promptly furnish a corrected submittal in the form and number of copies specified for the initial submittal. If the Contractor considers any correction indicated on the submittals to constitute a change to the contract, a notice in accordance with the Contract Clause "Changes" shall be given promptly to the Contracting Officer.

1.9 WITHHOLDING OF PAYMENT

Payment for materials and equipment incorporated or installed in the facility and not in compliance with the contract documents or if required approvals have not been obtained will not be made.

1.10 PAYMENT

Separate payment, except as identified in the BID SCHEDULE, will not be made for submittals of contract data, and all costs associated therein shall be included in the applicable unit prices or lump sum prices contained in the schedule.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 GENERAL

All drawings and data submitted and approved will form a part of the contract. The Contracting Officer may request submittals in addition to those specified when deemed necessary to adequately describe the work covered in the respective sections. Submittals shall be made in the respective number of copies and to the respective addresses set forth herein. Submittals shall include items such as: Contractor's, manufacturer's, or fabricator's drawings; descriptive literature including (but not limited to) catalog cuts, diagrams, operating charts or curves; test reports; test cylinders; samples; O&M manuals (including parts list); certifications; warranties and other such required submittals.

3.1.1 Scheduling

Submittals covering component items forming a system or items that are interrelated shall be scheduled to be coordinated and submitted concurrently. Certifications to be submitted with the pertinent drawings shall be so scheduled. Adequate time (a minimum of 35 calendar days exclusive of mailing time) shall be allowed on the register for review and approval. No delays damages or time extensions will be allowed for time lost in late submittals. Submittals requiring Government approval shall be scheduled and made prior to the acquisition of the material or equipment covered thereby.

3.2 CONTRACT DATA REQUIREMENTS LIST

The Contract Data Requirements List (CDRL) (DD Form 1423) is included as an attachment under Section J ATTACHMENTS. The task order specific submittals register shall be specifically edited or revised by the Contractor to indicate the actual work items under the order.

3.3 SUBMITTAL REGISTER (ENG Form 4288)

The ENG Form 4288 shall be created by the Contractor using the submittal listings at the beginning of each specification section prior to the submittal coordination meeting. During the submittal coordination meeting, a preliminary submittal register will be created by annotating this Form 4288. When the final submittal register is submitted for approval, the Contractor shall complete the column entitled "Item No." and all data under "Contractor Schedule Dates" and return five completed copies to the COR for approval. The Contractor shall review the list to ensure its completeness and may expand general category listings to show individual entries for each item. The numbers in column "Item No." are to be assigned sequentially starting with "1" for each specification section. DO NOT preassign transmittal numbers when preparing the submittal register. When a conflict exists between the submittal register and a submittal requirement in the technical sections, the approved submittal register shall govern. The preliminary, and then the final approved submittal register, will become the scheduling documents and will be updated monthly and used to control submittals, including all task order specific submittals, throughout the life of the contract. Names and titles of individuals authorized by the Contractor to approve shop drawings shall be submitted to COR with the final 4288 form. Supplier or subcontractors certifications are not acceptable as meeting this requirement.

See Attachment C for sample form.

3.4 TRANSMITTAL FORM (ENG Form 4025)

The Contractor shall complete ENG Form 4025, "Transmittal of Shop Drawings, Equipment Data, Material Samples, or Manufacturer's Certificates of Compliance" and forward a completed copy of same with each copy of shop drawings, certificates of compliance, materials, fixtures and equipment lists submitted for approval. No translucent or coated reproduced copies will be accepted. Each item submitted shall be listed separately on the ENG Form 4025. For new submittals or resubmittals mark the appropriate box; or resubmittals also insert previous transmittal number. Blank ENG Forms 4025 will be furnished by the Contracting Officer on request. Each submittal shall be identified with the Contractor's name, Contract Number, Transmittal Number, and Item Number to correspond with Item Number listed on ENG Form 4288. The following identification shall be marked on submittals as applicable:

- Contract Number
- Project Title and Location
- Subcontractor's Name
- Supplier's Name or Manufacturer's Name
- Specification Section and Paragraph Number
- Contract Drawing File Number

See Attachment B for sample form.

3.5 CONTRACT DATA SUBMITTAL FORMAT

Each submittal shall be complete and in sufficient detail to allow ready determination of compliance with contract requirements. Units of weights and measures used on all submittals shall be the same used in the contract documents. Prior to submittal, all items shall be checked and approved by the Contractor's representative or project manager and each item of the submittal shall be stamped, signed, and dated and each respective transmittal form (ENG Form 4025) shall be signed, and dated by the representative or project manager certifying that the accompanying submittal complies with the contract requirements. This procedure applies to all transmittals regardless of classification (Information Only or Government Approved). Proposed deviations from the contract requirements shall be clearly identified.

3.5.1 Format for Drawings

- a. Shop drawings shall not be less than 8 1/2 by 11 inches nor more than 28 x 40 inches.
- b. Present 8 1/2 x 11 inches sized shop drawings as a part of the bound volume for the submittals required by the specifications or work to be described. Present larger drawings in sets.
- c. Include on each drawing a title block in lower right hand corner with a 3- by 4-inch clear area adjacent. Title block shall contain subcontractor's or fabricator's name, Contract number, drawing title, number, date, bid item number, and a revision block. Contractor shall submit the required number of prints of any type. Provide a blank margin of 3/4 inch at bottom, 2 inches at left, and 1/2 inch at top and right.

d. Dimension all drawings, except diagrams and schematic drawings; prepare drawings demonstrating interface with other trades to scale. Identify materials and products for work shown.

e. Where drawings are submitted for assemblies of more than one piece of equipment or systems of components dependent on each other for compatible characteristics, complete information shall be submitted on all such related components at the same time. Contractor shall insure that information is complete and that sequence of drawing submittal is such that all information is available for reviewing each drawing. Drawings for all items and equipment, of special manufacture or fabrication, shall consist of complete assembly and detail drawings.

f. All revisions after initial submittal shall be shown by number, date, and subject in revision block.

3.5.2 Format for Data, Test Reports and Samples

a. Present product data submittals for each system or assembly as a complete, bound volume. Include a table of contents listing page and catalog item numbers for product data.

b. Indicate, by prominent notation, each product which is being submitted; indicate the specification section number and paragraph number to which it pertains.

c. Preprinted material such as illustrations, standard schedules, performance charts, instructions, brochures, diagrams, manufacturer's descriptive literature, catalog data, and other data to illustrate a portion of work, but not prepared exclusively for this contract, shall be presented with inapplicable portions marked out, applicable items, such as model numbers, sizes and accessories shall be specifically identified.

d. Supplement product data with material prepared for the project to satisfy submittal requirements for which product data does not exist. Identify this material as developed specifically for the project.

e. Routine field tests shall be delivered to the QAR with the daily Quality Control reports. See SECTION: E and technical specifications for requirements.

f. Provide samples as described in the respective technical specification requiring the sample item.

3.5.3 Format of Administrative Submittals (SD-13, SD-18)

a. When the submittal includes a document which is to be used in the project or become a part of the project record, other than as a submittal, do not apply the Contractor's approval stamp to the document, but to a separate sheet accompanying the document.

b. Operation and Maintenance Manual Data: Submit in accordance with Section 01782 OPERATION AND MAINTENANCE DATA. Include components required in that section and the various technical sections.

3.6 SUBMITTAL PROCEDURE

3.6.1 Quantity of Submittals

Three copies of all submittals shall be submitted to the following office. Each copy of the submittal shall be accompanied by a copy of the completed transmittal Form 4025 containing a list of all submittal items. When drawings are submitted each drawing/sheet shall be listed separately giving sheet number, title and any other information needed to identify the item. Transmittals shall be addressed to the following office:

(3 Copies) CENWP-HDC-P Department of the Army
Portland District, Corps of Engineers
Hydroelectric Design Center
ATTN: CENWP-HDC-P
P. O. Box 2946
Portland, OR 97208-2946

P.O.C.: Mark Pierce 503-808-4281

For each Task Order additional copies (number to be identified in the task order) of each submittal shall be submitted to the office identified in the Task Order. Each copy of these submittals shall be accompanied by transmittal Form 4025 containing a list of all submittal items. When drawings are submitted each drawing/sheet shall be listed separately giving sheet number, title and any other information needed to identify the item.

3.6.2 Processing of Government Approved Submittals

Government will review submittals and provide pertinent notation within 30 calendar days after date of submission. One copy of each item submitted will be returned to the Contractor with the following notations:

3.6.2.1 Action Codes

The following action codes are to further define only the referenced codes on the reverse side of ENG Form 4025.

a. Action Code A (Approved as Submitted). Drawings which can be approved without correction will be stamped "Approved", two copies of catalog and other printed data, will be returned to the Contractor.

b. Action Code B (Approved, Except as Noted, Resubmission Not Required). Drawings which have only minor discrepancies will be corrected and stamped "Approved as Corrected" or "Except as Noted." Corrections will be identified. Distribution will be same as for "Approved" drawings.

c. Action Code C (Approved, Except as Noted, Resubmission Required). Two prints of drawings which are incomplete or require more than minor corrections will be marked in red to indicate necessary corrections. One marked copy will be returned to the Contractor stamped "Returned for Correction."

d. Action Code E (Disapproved). One print of drawings which are fundamentally in error, cover wrong equipment or construction, or require extensive corrections will be returned to the Contractor stamped "Disapproved." An explanation will be furnished on the print or on ENG Form 4025 indicating reason for disapproval.

e. Re-submittal. Re-submittal will not be required for drawings with Action Code A or B unless subsequent changes are made by the Contractor or by a contract modification. For drawings with Action Code C or E, corrections required shall be made, any changes shall be noted by dating the revisions to correspond with the change request date, and the drawings shall be promptly resubmitted for review. Government costs incurred after the first re-submittal will be charged to the Contractor.

3.6.2.2 Contractor Responsibilities Upon Receiving Government Annotated Submittals

3.6.2.2.1 The Government will return one copy of each item submitted within 30 calendar days after receipt and retain the remaining copies. An A, B, or C Action Code will authorize the Contractor to proceed with the fabrication of the equipment covered by such drawings, subject to the corrections, if any, indicated thereon or described in the letter of transmittal. Required revisions shall be resubmitted by the same procedure as previously described. Every revision made during the life of the contract shall be shown by number, date, and subject in a revision block and a notation shall be made in the drawing margin to permit rapid location of the revision. The time consumed by the Contractor in submitting and obtaining approval of assembly and shop drawings shall be included in the time allowed for completion of the contract.

3.6.2.2.2 Submittal of Corrected Drawings

Upon receipt of prints which have Action Codes C, D, or E the Contractor shall within 30 calendar days after receipt, submit corrected (reproducibles and) prints of each drawing to the addresses in paragraph 3.6.1. If revisions are made after a drawing has been assigned an A or B code, the Contractor shall furnish corrected reproducibles and prints subsequent to each revision.

3.6.3 Deviations

For submittals which include proposed deviations requested by the Contractor, the column "variation" of ENG Form 4025 shall be checked. The Contractor shall set forth in writing the reason for any deviations and annotate such deviations on the submittal. The Government reserves the right to rescind inadvertent approval of submittals containing unnoted deviations.

3.7 INFORMATION ONLY SUBMITTALS

Normally submittals for information only will not be returned. Approval of the Contracting Officer is not required on information only submittals. These submittals will be used for information purposes. The Government reserves the right to require the Contractor to resubmit any item found not to comply with the contract. This does not relieve the Contractor from the obligation to furnish material conforming to the plans and specifications and will not prevent the Contracting Office from requiring removal and replacement of nonconforming material incorporated in the work. This does not relieve the Contractor of the requirement to furnish

samples for testing by the Government laboratory or check testing by the Government in those instances where the technical specifications so prescribe.

3.8 AS-BUILT DRAWINGS

Refer to requirements under Section 01770 CLOSEOUT PROCEDURES AND SUBMITTALS, paragraph As-Built Drawings.

3.9 STAMPS

Stamps used by the Contractor on the submittal data to certify that the submittal meets contract requirements shall be similar to the following:

<p style="text-align: center;">CONTRACTOR</p> <p style="text-align: center;">(Firm Name)</p> <p>_____ Approved</p> <p>_____ Approved with corrections as noted on submittal data and/or attached sheets(s).</p> <p>SIGNATURE: _____</p> <p>TITLE: _____</p> <p>DATE: _____</p>

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Attachment A

SUBMITTAL DESCRIPTIONS

The submittals described below are those which may be required and are further described in other sections of the specifications. Submittals required by the CONTRACT CLAUSES and other non-technical parts of the contract are not included in this section.

Throughout these specifications submittals may be identified with the prefix "SD" followed by a number. This number and prefix are for book keeping and record sorting in the system. The SD stands for submittal data and the number is a category, i.e. data, drawings, reports, etc. The submittal register shows either the title of the item being submitted or the number and title of the item being submitted.

SD-01 Data

Submittals which provide calculations, descriptions, or documentation regarding the work.

SD-04 Drawings

Submittals which graphically show relationship of various components of the work, schematic diagrams of systems, details of fabrication, layouts of particular elements, connections, and other relational aspects of the work.

SD-06 Instructions

Preprinted material describing installation of a product, system or material, including special notices and material safety data sheets, if any, concerning impedances, hazards, and safety precautions. Operation and maintenance manuals are considered deliverables under the contract and not submittals; however, when necessary to review information to be included in the final manuals such information to be included in the final manuals should be called for under this submittal description.

SD-07 Schedules

Tabular lists showing location, features, or other pertinent information regarding products, materials, equipment, or components to be used in the work.

SD-08 Statements

A document, required of the Contractor, or through the Contractor, from a supplier, installer, manufacturer, or other lower tier Contractor, the purpose of which is to confirm the quality or orderly progression of a portion of the work by documenting procedures, acceptability of methods or personnel, qualifications, or other verifications of quality.

SD-09 Reports

Reports of inspections or tests, including analysis and interpretation of test results. Each report shall be properly identified. Test methods used shall be identified and test results shall be recorded.

Attachment A (Con.)

SUBMITTAL DESCRIPTIONS

SD-13 Certificates

Statement signed by an official authorized to certify on behalf of the manufacturer of a product, system or material, attesting that the product, system or material meets specified requirements. The statement must be dated after the award of this contract, must state the Contractor's name and address, must name the project and location, and must list the specific requirements which are being certified.

SD-14 Samples

Samples, including both fabricated and unfabricated physical examples of materials, products, and units of work as complete units or as portions of units of work.

SD-18 Records

Documentation to record compliance with technical or administrative requirements.

ATTACHMENT B

ENG FORM 4025

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Submittal of Contract Data

INSTRUCTIONS

1. Section I will be initiated by the Contractor in the required number of copies.
2. Each transmittal shall be numbered consecutively in the space provided for "Transmittal No.". This number, in addition to the contract number, will form a serial number for identifying each submittal. For new submittals or resubmittals mark the appropriate box; on resubmittals, insert transmittal number of last submission as well as the new submittal number.
3. The "Item No." will be the same "Item No." as indicated on ENG FORM 4288-R for each entry on this form.
4. Submittals requiring expeditious handling will be submitted on a separate form.
5. Separate transmittal form will be used for submittals under separate sections of the specifications.
6. A check shall be placed in the "Variation" column when a submittal is not in accordance with the plans and specifications--also, a written statement to that effect shall be included in the space provided for "Remarks".
7. Form is self-transmittal, letter of transmittal is not required.
8. When a sample of material or Manufacturer's Certificate of Compliance is transmitted, indicate "Sample" or "Certificate" in column c, Section I.
9. U.S. Army Corps of Engineers approving authority will assign action codes as indicated below in space provided in Section I, column i to each item submitted. In addition they will ensure enclosures are indicated and attached to the form prior to return to the contractor. The Contractor will assign action codes as indicated below in Section I, column g, to each item submitted.

THE FOLLOWING ACTION CODES ARE GIVEN TO ITEMS SUBMITTED

A --	Approved as submitted.	E --	Disapproved (See attached).
B --	Approved, except as noted on drawings.	F --	Receipt acknowledged.
C --	Approved, except as noted on drawings. Refer to attached sheet resubmission required.	FX --	Receipt acknowledged, does not comply as noted with contract requirements.
D --	Will be returned by separate correspondence.	G --	Other (Specify)

10. Approval of items does not relieve the contractor from complying with all the requirements of the contract plans and specifications.

(Reverse of ENG Form 4025-R)

ATTACHMENT C
SUBMITTAL REGISTER (ENG FORM 4288)

1. Basic Contract Submittals - Submit at beginning of contract
thereafter submit only addendums for changes
2. Individual Task Order Submittals - Submit with each Task Order under the
contract as required and applicable

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SECTION 01350
ENVIRONMENTAL PROTECTION
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PART 1 GENERAL

- 1.1 GENERAL INFORMATION
- 1.2 APPLICABLE REGULATIONS
- 1.3 SUBMITTALS
- 1.4 NONCOMPLIANCE
- 1.5 SUBCONTRACTORS

PART 2 PRODUCTS

(NOT USED)

PART 3 EXECUTION

- 3.1 IMPLEMENTATION
- 3.2 ENVIRONMENTAL LITIGATION
- 3.3 DISPOSAL OF HAZARDOUS WASTE

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SECTION 01350

ENVIRONMENTAL PROTECTION

PART 1 GENERAL

1.1 GENERAL INFORMATION

This section covers preventing environmental pollution and minimizing environmental degradation during and as a result of operations, required for the fabrication and installation of retrofit breaker assemblies. The requirements of SECTIONS 02090 and 13280 shall be in conjunction with this section in addition to other sections which may contain environmental protection requirements.

1.2 APPLICABLE REGULATIONS

All environmental pollution shall be prevented, abated, and controlled and environmental degradation arising from construction activities shall be minimized by complying with all applicable Federal, state, and local laws and regulations, as well as specific requirements of this contract. Where conflicting or duplicate regulations apply, the most stringent requirement shall govern. Contractor shall comply with the following list of environmental regulations where applicable. This list is not inclusive of all environmental requirements, but represents the Federal regulations most likely to apply to work under this contract.

- a. Clean Air Act - 40 CFR 61: Emission Standards for Hazardous Air Pollutants
- b.. Solid Waste Disposal Act - 40 CFR 241: Land Disposal - 40 CFR 245: Resource Recovery
- c. Resource Conservation and Recovery Act - 40 CFR 260-272: Hazardous Waste Management
- d. Comprehensive Environmental Response , Compensation and Liability Act - 40 CFR 300-302: National Oil and Hazardous Substances Contingency Plan for hazardous substance spills and cleanup
- e. Clean Water Act - 40 CFR 110-117 122 : Point source discharges into U.S. waters
- f. Executive Order 12856 - Federal Compliance Order with the Emergency Planning and Community Right-to-Know Act and the Pollution Prevention Act
- g. 49 CFR 100-177 Hazardous Materials Transportation Regulations

1.3 SUBMITTALS

Submittals required by this section of the Technical Specifications shall be for Government approval (GA) or for information only (FIO), and shall be submitted as stated below in accordance with Section 01330 SUBMITTAL OF CONTRACT DATA. The time of submittal shall be as indicated below.

SD-01 Data

Environmental Protect Plan; GA

Within 10 calendar days following notice to proceed (par. 3.1.1).

1.4 NONCOMPLIANCE

An order stopping all or part of the work may be issued for failure to comply with the provisions of this section until corrective action has been taken. No time lost due to such stop orders or stop orders issued by any appropriate Federal, state or local environmental protection agency shall be the subject of a claim for extension of time or for costs or damages unless it is later determined that the Contractor was in compliance.

1.5 SUBCONTRACTORS

Compliance with this section by subcontractors will be the responsibility of the Contractor.

PART 2 PRODUCTS

(NOT USED)

PART 3 EXECUTION

3.1 IMPLEMENTATION

3.1.1 Planning

The approved Environmental Protection Plan including proposals for implementing this section for environmental protection will be checked for completeness and compliance. If satisfactory it will be approved and one copy will be returned. If unsatisfactory it will be returned for resubmission. No physical work at the site shall be started until this plan has been approved or specific authorization is obtained to start a phase of the work. Preparation and submittal of supplemental plans may be required if additional environmental protection planning is found necessary for later phases of work. As a minimum the plan shall include the sections indicated below:

a. A contamination-prevention section listing all potentially hazardous petroleum products and hazardous and toxic materials used by the Contractor in the performance of his work or in his equipment at the powerhouse and corresponding provisions to be taken to prevent accidental or intentional introduction of such materials into any waterway. This section is to include plans for preventing polluted run-off from plant, equipment parking and maintenance areas from entering local water bodies.

b. A containment and cleanup section including the procedures, instructions, and reports to be used in the event of an unforeseen oil, hazardous material, or chemical spill. This section shall include as a minimum:

(1) The name of the individual who will be responsible for implementing and supervising the containment and cleanup.

(2) Material and equipment for cleanup work shall be tailored to the potential hazards involved.

(3) The names and locations of suppliers of containment materials and names and locations of additional fuel oil recovery, cleanup, restoration, and disposal equipment available in case of an unforeseen spill emergency.

(4) The methods and procedures to be used for expeditious cleanup.

(5) The name of the individual who will report any spills and who will follow up with complete documentation.

3.1.2 Coordination

Prior to the work, a meeting shall be held with the Government to develop mutual understandings relative to the administration of the environmental protection program.

3.1.3 Surveillance

During the work, all activities, including those of subcontractors, shall be supervised to assure compliance with the intent and details of the Plan. Training courses shall be conducted by the Contractor for himself and his subcontractors to assure that all personnel working at the site are familiar with the environmental protection provisions. All equipment and materials for environmental protection shall be inspected periodically to assure that they are in proper order and have not deteriorated.

3.1.4 Completion

Before this contract is completed, all restoration, cleanup and other work required to leave the site in an acceptable condition shall have been completed. Final payment will not be made until the environmental protection requirements have been met.

3.1.5 Protection of Water Resources

No water courses shall be polluted or have existing pollution contributed to with any petroleum products, oils, lubrications, or other toxic materials harmful to life. Chemical emulsifiers, dispersants, coagulants or other cleanup compounds shall not be used without prior written approval. Compliance with state water quality standards and conditions of any permits and clearances obtained for the work is the Contractor's responsibility.

3.2 ENVIRONMENTAL LITIGATION

3.2.1 General

If the performance of all or any part of the work is suspended, delayed, or interrupted due to an order of a court of competent jurisdiction as a result of environmental litigation, as defined below, the Government at the request of the Contractor will determine whether the order is due in any part to the acts or omission of the Contractor or a subcontractor at any tier not required

by the terms of this contract. If it is determined that the order is not due in any part to the acts or omissions of the Contractor or a subcontractor at any tier other than as required by the terms of this contract, such suspension, delay, or interruption shall be considered as if ordered by the Government in the administration of this contract under the terms of SECTION I Clause SUSPENSION OF WORK. The period of such suspension, delay, or interruption shall be considered unreasonable, and an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) as provided in that clause, subject to all the provision thereof.

3.2.2 Definition

The term "environmental litigation," as used herein, means a lawsuit alleging that the work will have an adverse effect on the environment or that the Government has not duly considered, either substantively or procedurally, the effect of the work on the environment.

3.3 DISPOSAL OF HAZARDOUS WASTE

The following shall apply to disposal of any hazardous waste:

- a. The Contractor, where possible, will use or propose for use materials which may be considered environmentally friendly in that waste from such materials is not regulated as a hazardous waste or is not considered harmful to the environment.
- b. Documentation for analysis, sampling, transportation, and disposal of all hazardous waste streams generated during this contract shall be in accordance with 40 CFR parts 260 through 272 and 49 CFR 100-177.
- c. A copy of all hazardous waste determinations, sample results, and shipping manifests shall be furnished to the Government Quality Assurance Representative (GQAR) to verify compliance with Federal, State, and local regulations.
- d. All hazardous wastes shall be removed from the Project for proper disposal within 90 days of waste generation. All hazardous waste shall be packaged, labeled, and marked in accordance with 40 CFR 172 and 173. All hazardous waste shall be stored in accordance with 40 CFR 264.
- e. Certificates of Destruction or Disposal Certificates shall be submitted for all hazardous wastes within 14 days of actual disposal.
- f. The Contractor's EPA identification number shall be used to dispose of all hazardous wastes generated by the Contractor and its subcontractors under this contract. This is construed to mean all hazardous wastes the Contractor or subcontractors generate from materials brought on the site for the purpose of performing work under the terms of the contract.
- g. The Government's EPA identification number shall be used to dispose of all hazardous waste generated from Government-owned facilities on the project. This is construed to mean hazardous wastes generated from the repair, demolition, or removal of any existing materials and buildings from Government facilities and is not intended to include any wastes generated by the Contractor in the performance of its work.

h. It is the responsibility of the Contractor to prepare all hazardous waste manifests. The Contractor shall prepare manifests for Government signature when the Government's EPA identification number is used. The manifest shall be submitted 48 hours in advance of the waste being removed. The ECC will review and sign the manifest when the transporter arrives.

i. Hazardous or dangerous waste shall be recycled to the maximum extent possible. Placing hazardous or dangerous waste in a permitted hazardous waste landfill shall be the last resort. If such facility is necessary, the Contractor shall dispose of it in compliance with Federal, state and local requirements.

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SECTION 01770

CLOSEOUT PROCEDURES AND SUBMITTALS

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PART 1 GENERAL

- 1.1 SUBMITTALS
- 1.2 PROJECT RECORD DOCUMENTS
- 1.3 EQUIPMENT/PRODUCT WARRANTIES
- 1.4 TESTING
- 1.5 CLEANUP

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

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SECTION 01770

CLOSEOUT PROCEDURES AND SUBMITTALS

PART 1 GENERAL

1.1 SUBMITTALS

Submit the following in accordance with Section 01330 SUBMITTAL OF CONTRACT DATA:

Equipment/product warranty list

As-built drawings

1.2 PROJECT RECORD DOCUMENTS

1.2.1 As-Built Drawings

Upon completion of the work for an individual task order under this contract the Contractor shall furnish to the address shown in Section 01330, paragraph 3.6.1 three complete sets of black and white prints of all drawings as finally approved and three additional sets to the office identified in the individual Task Order. These prints shall show all changes and revisions, including any field changes made up to the time that the equipment is completed and accepted and the contract number shall be shown thereon. The number shall be located immediately above the title block if possible.

1.3 EQUIPMENT/PRODUCT WARRANTIES

1.3.1 Warranty Of Supplies Of A Noncomplex Nature (1984 Apr)

1.3.1.1 Definitions: "Acceptance," as used in this clause, means the act of an authorized representative of the Government by which the Government assumes for itself, or as an agent of another, ownership of existing supplies, or approves specific services as partial or complete performance of the contract.

"Correction," as used in this clause, means the elimination of a defect.

"Supplies," as used in this clause, means the end item furnished by the Contractor and related services required under the contract. The word does not include "data."

1.3.1.2 Contractor's Obligations:

(1) Notwithstanding inspection and acceptance by the Government of supplies furnished under this contract or any condition of this contract concerning the conclusiveness thereof, the Contractor warrants that for 5 years after successful completion of tests and acceptance by the Government:

(a) All supplies furnished under this contract will be free from defects in design, material, or workmanship and will conform with the specifications and all other requirements of this contract.

(b) The preservation, packaging, packing, and marking, and the preparation for, and method of, shipment of such supplies will conform with the requirements of this contract.

(2) When return, correction, or replacement is required, transportation charges and responsibility for the supplies while in transit shall be borne by the Contractor. However, the Contractor's liability for the transportation charges shall not exceed an amount equal to the cost of transportation by the usual commercial method of shipment between the place of delivery specified in this contract and the Contractor's plant, and return.

(3) Any supplies or parts thereof, corrected or furnished in replacement under this clause, shall also be subject to the terms of this clause to the same extent as supplies initially delivered. The warranty, with respect to supplies or parts thereof, shall be equal in duration to that in paragraph 1.3.1.2 (1) of this clause and shall run from the date of delivery of the corrected or replaced supplies.

(4) All implied warranties of merchantability and "fitness of a particular purpose" are excluded from any obligation contained in this contract.

1.3.2 Remedies available to the Government:

(1) The Contracting Officer shall give written notice to the Contractor of any breach of the warranties in paragraph 1.3.1.2 of this clause within 30 calendar days after discovery of the defect.

(2) Within a reasonable time after such notice, the Contracting Officer may either:

(a) Require, by written notice, the prompt correction or replacement of any supplies or parts thereof (including preservation, packaging, packing, and marking) that do not conform with the requirements of this contract within the meaning of paragraph 1.3.1.2 of this clause.

(b) Retain such supplies with payment, therefore, reduced by an amount equitable under the circumstances.

(3) (a) If the contract provides for inspection of supplies by sampling procedures, conformance of supplies or components subject to warranty action shall be determined by the applicable sampling procedures contained in the contract:

(a1) The Contracting Officer may for sampling purposes group any supplies delivered under this contract.

(a2) Shall require the size of the sample to be that required by sampling procedures specified in the contract for the quantity of supplies on which warranty action is proposed.

(a3) May project warranty sampling results over supplies in the same shipment or other supplies contained in other shipments even though all of such supplies are not present at the point of re-inspection, provided the supplies remaining are reasonably representative of the quantity on which warranty action is proposed.

(a4) Need not use the same lot size as on original inspection or reconstitute original inspection lots.

(b) Within a reasonable time after notice of any breach of warranties in paragraph 1.3.1.2 of this clause, the Contracting Officer may exercise one or more of the following options:

(b1) Require an equitable adjustment in the contract price for any group of supplies.

(b2) Screen the supplies grouped for warranty action under this clause at Contractor's expense and return all nonconforming supplies to the Contractor for correction or replacement.

(b3) Require the Contractor to screen the supplies at locations designated by the Government within the continental United States and to correct or replace all nonconforming supplies.

(b4) Return the supplies grouped for warranty action under this clause to the Contractor (irrespective of the f.o.b. point or the point of acceptance) for screening and correction or replacement.

(4) (a) The Contracting Officer may, by contract or otherwise, correct or replace the nonconforming supplies with similar supplies from another source and charge to the Contractor the cost occasioned to the Government thereby if the Contractor:

(a1) Fails to make redelivery of the corrected or replaced supplies within the time established for their return.

(a2) Fails either to accept return of the nonconforming supplies or fails to make progress after their return to correct or replace them so as to endanger performance of the delivery schedule, and in either of these two circumstances does not cure such failure within a period of ten (10) days (or such longer period as the Contracting Officer may authorize in writing) after receipt of notice from the Contracting Officer specifying such failure.

(b) Instead of correction or replacement by the Government, the Contracting Officer may require an equitable adjustment of the contract price. In addition, if the Contractor fails to furnish timely disposition instruction, the Contracting Officer may dispose of the nonconforming supplies for the Contractor's account in a reasonable manner. The Government is entitled to reimbursement from the Contractor or from the proceeds of such disposal for the reasonable expenses of the care and disposition of the nonconforming supplies, as well as for the excess costs incurred or to be incurred.

(5) The rights and remedies of the Government provided in this clause are in addition to and do not limit any rights afforded to the Government by any other clause of the contract. (FAR 57.246-17.)

1.4 TESTING

All contract requirements for circuit breakers and associated items to be installed shall be fully completed, including all testing, prior to contract completion date.

1.5 CLEANUP

Leave premises "broom clean." Remove temporary labels, stains and foreign substances from all equipment. Remove waste and surplus materials, rubbish and construction facilities from the site.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

SECTION 01782

OPERATION AND MAINTENANCE DATA

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- 1.1 GENERAL INFORMATION
- 1.2 SUBMITTAL REQUIREMENTS
- 1.3 FORMAT
- 1.4 CATALOG DATA SHEETS AND SPARE PARTS LISTING
- 1.5 OPERATION DATA
- 1.6 MAINTENANCE DATA
- 1.7 PREVENTATIVE MAINTENANCE (PM) CHARTS

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

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SECTION 01782

OPERATION AND MAINTENANCE DATA

PART 1 GENERAL

1.1 GENERAL INFORMATION

Parts catalogs and operating instructions needed or useful in operation, maintenance, repairs, dismantling, or assembling, and for repair and identification of parts for ordering replacements, shall be especially prepared. The parts catalogs and operating instructions shall cover all equipment furnished under this contract and shall be assembled under a suitable common cover. The assembled material shall include complete identification of the spare parts furnished in compliance with the requirements of these specifications.

1.2 SUBMITTAL REQUIREMENTS.

An initial submittal of three complete draft copies of the above-mentioned material shall be made not less than 30 days prior to delivery of the first SF6 Breaker Assembly delivered under Schedule Item *****AB. Submittal shall be made in accordance with all applicable procedures for submittal of drawings (see Section 01330 SUBMITTAL OF CONTRACT DATA), except as provided herein. The Contracting Officer will return one draft copy with appropriate approval of, or comment on, the acceptability of the submittal. The Contractor shall resubmit the one draft copy with such corrected and/or additional data sheets and drawings as may be directed by the Contracting Officer. One copy of each data sheet and drawings shall be furnished also for the two draft copies retained by the Contracting Officer. Upon final approval of the draft, the Contractor shall submit eight additional copies for a total of eleven to the Contracting Officer. The copies shall be furnished no later than the date specified for delivery of the equipment.

1.3 FORMAT

Binders shall be side-binding, telescoping-post, expandable-back, and shall have a supported vinyl cover with a stiff binder board for 8 1/2- by 11-inch sheets. Ring-type loose leaf binders will not be acceptable. One 11- by 17-inch copy of each of the drawings shall be furnished and shall be folded and bound for easy unfolding without removal from the binder. Each sheet in the binder shall be numbered and an index provided for ready reference to the data. All standard catalog cuts, manufacturer's printed data or descriptive literature, parts sheets, illustrations, etc., shall be either original manufacturer sheets or reproduced copies of equal clarity and durability. The following identification shall be inscribed on the covers:

- (1) The words "OPERATIONS AND MAINTENANCE MANUAL."
- (2) The name and location of the building, facility, and/or project.
- (3) The volume number and total number of volumes.
- (4) The systems and/or equipment therein.
- (5) The name of the Contractor.

- (6) The contract number.
- (7) The year of completion of the contract.

Each manual shall contain a master table of contents. The master table of contents shall contain all chapters, appendixes, and a master index and shall be included in the front of the first volume if there is more than one volume. Each subsequent volume shall contain an index for the contents within that respective volume. Each volume shall not be broken between chapters, appendixes, and/or indexes. All chapters, appendixes, and indexes shall be adequately separated and identified by standard line indexes.

1.4 CATALOG DATA SHEETS AND SPARE PARTS LISTING.

All catalog data sheets and the spare parts listing shall be inserted in an appendix at the end of the manual following the preventative maintenance (PM) charts appendix. This appendix shall be for catalog data sheets and the spare parts listing only. An index of the catalog data sheets shall be provided to provide clear and concise reference to shop drawings and individual pages within the manual.

1.4.1 Catalog data sheets shall be inserted into the manual such that positive identification of all parts on catalog data sheets are clearly identified by:

- (1) Part Name. A clear and descriptive name shall be given to each component in the piece of equipment.
- (2) Manufacturer and Part Number. The name, address, and telephone number of the manufacturer shall be given along with the catalog part number.

Standard catalog data sheets will not be acceptable unless irrelevant parts are marked out (with black "x") and relevant parts clearly identified. Any data on catalog sheets which does not directly relate to purchased equipment shall be marked out. Parts shall be so identified that they can be readily ordered from local area industrial supply outlets if not of special manufacture. A cross-reference between items described in catalogs, instructions, and drawings shall be provided to facilitate ease of location of parts described. Highlighting and "scribble notes" will not be acceptable for identification purposes.

1.4.2 The spare parts listing shall clearly state the spare parts supplied and a list of recommended spare parts to be stocked. The spare parts listing shall clearly identify:

- (1) Part Name. A clear and descriptive name shall be given to each component listed as a spare part in the piece of equipment.
- (2) Manufacturer and Part Number. The name, address, and telephone number of the manufacturer shall be given along with the catalog part number.
- (3) Quantity. The quantity of each part listed as a spare part shall be given.
- (4) Reference to Catalog Data Sheets. Each spare part shall be referenced to the corresponding catalog data sheet by page number.

1.5 OPERATION DATA.

The operation data shall include specific operating instructions, functional description of operating parts, and special precautions or procedures to be considered. The Contractor shall be responsible for the necessary coordination between his subcontractors, suppliers, and manufacturers to assure complete submittals on individual interrelated equipment components.

1.6 MAINTENANCE DATA.

Maintenance data shall include instructions for inspection, testing, and maintenance; parts catalogs; and a list of special tools required.

1.7 PREVENTATIVE MAINTENANCE (PM) CHARTS.

PM charts shall be developed and provided in the manual. These charts shall include the following:

(1) Subject. A clear and descriptive name for the equipment requiring PM shall be given. Reference to shop drawings and catalog cuts shall be provided in a clear manner. "Checkpoints" shall be defined for each piece of equipment.

(2) Procedure. A detailed procedural description of the method in which to perform PM shall be provided for all equipment requiring PM work. Safety precautions shall be provided. Descriptions of "checkpoints" shall be provided.

(3) Dates. The PM charts shall include recommended PM intervals. The intervals shall be defined as requiring PM either daily, weekly, monthly, quarterly, semiannually, or annually. These charts shall be inserted in an appendix at the end of the manual. This appendix shall be for PM charts only. PM shall include inspection, testing, cleaning, replacement, and all routine maintenance work.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

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SECTION 02090

LEAD-BASED PAINT (LBP) ABATEMENT AND DISPOSAL

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- 1.8 COORDINATION WITH OTHER WORK
- 1.9 SAFETY AND HEALTH REGULATORY REQUIREMENTS
- 1.10 PRECONSTRUCTION SAFETY MEETING
- 1.11 ACCIDENT PREVENTION PLAN
- 1.12 RESPIRATORY PROTECTION PROGRAM
- 1.13 HAZARD COMMUNICATION PROGRAM
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- 1.15 PREPARATORY INSPECTION MEETING
- 1.16 TRAINED AND COMPETENT PERSONNEL
- 1.17 POSTED WARNINGS AND NOTICES
- 1.18 EQUIPMENT AND MATERIALS
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PART 2 PRODUCTS

(NOT USED)

PART 3 EXECUTION

- 3.1 PILOT ABATEMENT PROJECT – NOT USED
- 3.2 WORK PROCEDURES
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- 3.4 MONITORING
- 3.5 ADJACENT AREAS
- 3.6 CLEANUP AND DISPOSAL

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SECTION 02090

LEAD-BASED PAINT (LBP) ABATEMENT AND DISPOSAL

1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

CODE OF FEDERAL REGULATIONS (CFR)

29 CFR 1910	Occupational Safety and Health Standards
29 CFR 1926	Safety and Health Regulations for Construction
40 CFR 148	Hazardous Waste Injection Restrictions
40 CFR 260	Hazardous Waste Management System: General
40 CFR 261	Identification and Listing of Hazardous Waste
40 CFR 262	Standards Applicable to Generators of Hazardous Waste
40 CFR 263	Standards Applicable to Transporters of Hazardous Waste
40 CFR 264	Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
40 CFR 265	Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
40 CFR 268	Land Disposal Restrictions
49 CFR 172	Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements
49 CFR 178	Specifications for Packagings

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD)

HUD-01	(1996) Lead-Based Paint: Guidelines for the Availability and Control of Lead-Based Paint Hazards in Housing
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WASHINGTON ADMINISTRATIVE CODE (WAC)

WAC 296-155-176 (1995) Lead Exposure in Construction

WAC 173-340 (1996) Model Toxics Control Act

OREGON OCCUPATIONAL SAFETY AND HEALTH DIVISION

OR-OSHA 1926.62 (1995) Lead Exposure in Construction

ENGINEERING MANUALS (EM)

EM 385-1-1 (1996) U.S. Army Corps of Engineers Safety and Health Requirements Manual

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 701 (1996) Methods of Fire Test for Flame-Resistant Textiles and Films

NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH (NIOSH)

NIOSH OSHA Booklet 3142 Lead in Construction

UNDERWRITERS LABORATORIES (UL)

UL 586 (1996) High-Efficiency, Particulate, Air Filter Units

1.2 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL OF CONTRACT DATA:

SD-01 Data

Equipment List; GA.

A list of equipment items to be used in the work, including brand names, model, capacity, performance characteristics, quantities and other pertinent information.

SD-08 Statements

Lead-Based Paint (LBP) Management Plan; GA.

The Contractor shall review the specified abatement work tasks and abatement methods and shall prepare a detailed LBP Management Plan that identifies the work procedures, health, and safety measures to be used in LBP abatement. The plan shall address the various sources of lead and the methods to be undertaken to abate the lead hazards to include the following key elements:

- a. Location of LBP containing components keyed to project drawings.
- b. Abatement methods for each LBP containing component.
- c. Means for notifying occupants of proposed work schedules.
- d. Training requirements as required by Federal, state, and local regulations.
- e. Unique problems associated with the LBP abatement project.
- f. Sketch of LBP control areas and decontamination areas.
- g. Eating, drinking, smoking, and rest room procedures.
- h. Sequencing of LBP related work.
- i. Personnel protective equipment; respiratory protection program and controls.
- j. Engineering controls, containment structures and safety measures.
- k. Worker exposure assessment procedures.
- l. Work Practice controls.
- m. Housekeeping.
- n. Hygiene facilities and practice.
- o. Medical surveillance, including medical removal protection.
- p. Sampling, testing and analytical methods to include personal air sampling requirements of 29 CFR 1926 Section .62 and when specified or where required, environmental air sampling, dust wipe sampling (preabatement, during abatement, post abatement), (preabatement, post abatement, final clearance), toxicity characteristic leaching procedure (TCLP) of the waste material in accordance with 40 CFR 261. Procedures must include frequency, locations, and sampling and analytical methods to be used.

Hazardous Waste Management Plan; GA.

A Hazardous Waste Management Plan shall be prepared that complies with applicable requirements of Federal, state, and local hazardous waste regulations and addresses:

- a. Identification or documentation of potential hazardous wastes associated with the work.
- b. Estimated quantities of wastes to be generated and disposed of.
- c. Names and qualifications of each Contractor that will be transporting, storing, treating, and disposing of the wastes; the facility location, phone number, and name

of a 24-hour point of contact shall be included. Two copies of EPA, state, and local hazardous waste permit applications, permits, and EPA identification numbers.

- d. Names and qualifications (experience and training) of personnel who will be working onsite with hazardous waste.
- e. List of waste handling equipment to be used in performing the work to include cleaning, volume reduction, and transport equipment.
- f. Spill prevention, containment, and clean-up contingency measures to be implemented.
- g. Work plan and schedule for waste containment, removal, and disposal. Waste shall be cleaned up and containerized daily.
- h. Cost for hazardous waste disposal according to this plan.

Waste Disposal Plan; GA.

A Waste Disposal Plan shall be prepared that will include but not be limited to the following:

- a. A written confirmation that the debris will be treated and disposed of in accordance with the requirements of 40 CFR 260, 40 CFR 261, 40 CFR 262, 40 CFR 264 and 40 CFR 268.
- b. A written confirmation that transportation of the debris will be in accordance with 40 CFR 263.
- c. Waste subcontractor's name, address, telephone number, and landfill location, including copies of licenses and signed agreements.
- d. Landfill name, address, and telephone number. A copy of the landfill's state and locally issued license, and a signed agreement that the landfill will accept the LBP wastes.
- e. Detailed delivery tickets prepared, signed, and dated by an agent of the landfill, certifying the amount of LBP containing materials delivered to the landfill, within 3 days after delivery.
- f. **The Contractor shall obtain a signed hazardous waste manifest from the Contracting Officer prior to shipment of any hazardous wastes generated as a result of abatement activities.**

SD-09 Reports

Sampling Result; GA.

A daily log of the personal and environmental air sampling test results shall be reviewed by the Certified Industrial Hygienist (CIH) and submitted, in written form, no more than 48 hours after completion of the sampling cycle. The log shall list each sample result, sampling time and date, sample type, identification of personnel monitored, flow rate and duration, air

volume sampled, yield of lead, cassette size, analytical method used, analytical laboratory , and interpretation of results. Results shall be reported in micrograms of lead per cubic meter of air. In addition, the daily log shall include the results of dust wipe samples, soil samples and TCLP sampling including each phase of preabatement, during abatement and final clearance. Documentation of results that exceed specified limits (personal air samples that exceed 30 micrograms per cubic meter) or as required by Federal, state or local requirements shall be highlighted in the log in such a manner to make them easily distinguishable from monitoring results that do not exceed specified or regulatory limits.

SD-13 Certificates

Quality Assurance; GA.

Certificates shall meet the requirements of paragraph QUALITY ASSURANCE. The statements shall be signed and dated by a certifying officer after the award of this contract and contain the following:

- a. Contractor's name and address.
- b. Project name and location.
- c. The specified requirements that are being certified.

1.3 QUALITY ASSURANCE

1.3.1 Qualifications

- a. Contractor: Certification that the Contractor has prior experience on LBP abatement projects similar in nature and extent to ensure the capability to perform the abatement in a satisfactory manner.
- b. Competent Person: Certification that the Contractor's full-time onsite Competent Person meets the competent person requirements of 29 CFR 1926 Section .62 and is experienced in administration and supervision of LBP abatement projects, including work practices, protective measures for building and personnel, disposal procedures, etc. This person shall have completed a Contractor Supervisor LBP abatement course by an EPA Training Center or an equivalent certification course, and have had a minimum of 2 years on-the-job experience within the last 4 years.
- c. Certified Industrial Hygienist (CIH): Certification that the CIH has 2 years prior experience within the last 4 years on similar LBP abatement projects and is certified by the American Board of Industrial Hygiene (ABIH). The certification shall include a copy of the ABIH certificate showing certification number, and date of certification or recertification.
- d. Testing Laboratory: The name, address, and telephone number of the independent testing laboratory selected to perform sampling and analysis for personal and environmental air samples and lead dust wipes. Documentation that the laboratory performing the analysis is an EPA National Lead Laboratory Accreditation Program (NLLAP) accredited laboratory and that it is rated proficient in the NIOSH/EPA Environmental Lead Proficiency Analytical Testing Program (ELPAT). Certification

shall include accreditation for heavy metal analysis, list of experience relevant to analysis of lead in air, and a Quality Assurance and Quality Control Program. Currently, the American Association for Laboratory Accreditation (ASLA) and the American Industrial Hygiene Association (AIHA) are the EPA recognized laboratory accreditors. Documentation shall include the date of accreditation or reaccreditation.

1.3.2 Respiratory Protection Devices

Manufacturer's certification of NIOSH or the Mine Safety and Health Administration (MSHA) approval for respiratory protection devices utilized on the site.

1.3.3 Cartridges, Filters, and Vacuum Systems

Manufacturer's certification of NIOSH approval of respirator cartridges (organic vapor, acid gas, mist, dust, high efficiency particulate); High Efficiency Particulate Air (HEPA) filtration capabilities for all cartridges, filters, and HEPA vacuum systems.

1.3.4 Medical Records

Certification that employees who are involved in LBP abatement work have received medical examinations and will receive continued medical surveillance, including biological monitoring, as required by 29 CFR 1926 Section .62 and by the state and local regulations pertaining to such work. Records shall be retained, at Contractor expense, in accordance with 29 CFR 1910 Section .20.

1.3.5 Training

Training certification shall be provided prior to the start of work involving LBP abatement, for all of the Contractors' workers, supervisors and Competent Person. Training shall meet the requirements of 29 CFR 1926 Section .62 and 49 CFR 172, and that required by EPA or the state LBP course for the work to be performed. Training shall be provided prior to the time of job assignment and, at least, annually. Training may cover all abatement methods or focus only on those methods specified in the LBP Management Plan.

1.3.6 Licenses and Permits

Copies of licenses and permits as required by applicable Federal, state, and local regulations shall be obtained at least 10 days before the start of the LBP abatement project. Copies of each license/permit shall be provided the Contracting Officer.

1.4 DESCRIPTION OF WORK

Various electrical systems and cabinets at various federal dam facilities are scheduled for upgrade. These electrical systems are of varying age and may contain lead-based paint. Unless the Contractor is provided with a lead based paint survey indicating that the painted surfaces in question have been tested or the equipment was installed after 1978, the Contractor shall perform sampling to determine the presence of lead based paint in the work area. The Contractor shall report the lead content, material condition, quantity, and location of materials sampled to the Contracting Officer. The Contractor's EPA certified lead risk assessor or LBP technician shall perform the lead

based paint survey. Sampling may be performed with either an x-ray fluorescent (XRF) device or by paint chip sampling. The Contractor's abatement plan shall identify the locations and quantity of materials, engineering controls, abatement methods, and disposal method of lead paint waste.

1.5 SITE VISIT

Contractor shall visit and investigate the site, review the drawings and specifications, assess the amount of LBP, and become familiar with conditions which will affect the work.

1.6 LIABILITY INSURANCE FOR LBP

LBP abatement liability insurance shall be obtained without additional expense to the Government. The Contractor shall assume full responsibility and liability for the compliance with Federal, state, and local regulations pertaining to training, work practices, hauling, disposal, and protection of workers, visitors to the site, and persons occupying areas adjacent to the site.

1.7 PROTECTION OF EXISTING WORK TO REMAIN

Abatement, storage, transportation, and disposal work shall be performed without damaging or contaminating adjacent work and areas. Where such work or areas are damaged or contaminated, the Contractor shall restore work and areas to the original condition.

1.8 COORDINATION WITH OTHER WORK

Abatement and disposal work shall be coordinated with existing work and/or concurrent work being performed in adjacent areas.

1.9 SAFETY AND HEALTH REGULATORY REQUIREMENTS

Work shall be performed in accordance with requirements of EM 385-1-1 and applicable regulations including, but not limited to 29 CFR 1910, 29 CFR 1926, especially Section .62. Matters of interpretation of the standards shall be submitted to the appropriate agency for resolution before starting work. Where these requirements vary, the most stringent shall apply.

1.10 PRECONSTRUCTION SAFETY MEETING

The Contractor shall attend a preconstruction safety meeting prior to starting any work involving LBP abatement. Items required to be submitted will be reviewed for completeness, and where specified, for acceptance.

1.11 ACCIDENT PREVENTION PLAN

1.11.1 Preparation and Implementation

The Accident Preparation Plan (APP) shall be prepared in accordance with EM 385-1-1, Table 1-1. Where the topic in table 1-1 is not applicable, the APP shall justify its omission or reduced level of detail, and establish that adequate consideration was given to the topic. The APP shall cover onsite work by the Contractor or subcontractors. The Competent Person

shall be responsible for development, implementation, and quality control of the content and actions required in the APP. For each anticipated work task, the APP shall establish hazards and control measures. The APP shall be easily readable and understandable by the Contractor's work force.

1.11.2 Acceptance and Modifications

The APP shall be prepared, signed and dated by the Contractors Competent Person and submitted 10 days prior to the preconstruction safety conference. Deficiencies in the APP shall be discussed at the Preconstruction Safety Conference and the APP shall be revised to correct the deficiencies, and resubmitted for acceptance. Onsite work shall not begin until the APP has been accepted unless otherwise authorized by the Contracting Officer. One copy of the APP shall be maintained in the Contractor's jobsite file, and a second copy shall be posted where it will be accessible to personnel on the site. As work proceeds, the APP shall be adapted to new situations and conditions. Changes to the APP shall be made with concurrence of the Competent Person and Site Superintendent, and acceptance of the Contracting Officer. Should an unforeseen hazard become evident during performance of the work, the Competent Person shall bring such hazard to the attention of the Superintendent and the Contracting Officer, both verbally and in writing, for resolution as soon as possible. In the interim, the Contractor shall take necessary action to re-establish and maintain safe working conditions; and to safeguard onsite personnel, visitors, the public, and the environment. Disregard for provisions of this specification, or the accepted APP shall be cause for stopping of work until the matter is rectified.

1.11.3 Activity Hazard Analyses

An Activity Hazard Analysis (AHA) shall be prepared prior to beginning each major phase of the work and submitted for review and acceptance. Format shall be in accordance with EM 385-1-1, figure 1-1.

1.12 RESPIRATORY PROTECTION PROGRAM

A respiratory protection program shall be established as required by 29 CFR 1926 Section .103 and .62 and in accordance with 29 CFR 1910 Section .134. An approved respirator shall be furnished to each employee and visitor required to enter a LBP work control area. A fit test shall be conducted in accordance with 29 CFR 1926 Section .62, Appendix D.

1.13 HAZARD COMMUNICATION PROGRAM

A Hazard Communication Program shall be implemented in accordance with 29 CFR 1926 Section .59.

1.14 SAFETY AND HEALTH OVERSIGHT

The Competent Person shall be the onsite person responsible for coordination, safety, security and execution of the work. The Competent Person shall be able to identify existing and predictable lead hazards and shall have the authority to take corrective measures to eliminate them. The CIH shall be responsible for personal and environmental sampling. The Contractor shall hire an independent certified lead risk assessor to collect dust clearance wipe samples.

1.15 PREPARATORY INSPECTION MEETING

The Contractor and COR shall arrange and hold a preparatory inspection meeting immediately prior to beginning any LBP abatement. The APP, Activity Hazard Analyses, and the Contractor's LBP Management Plan, including containment, engineering controls, worker protection, training, and monitoring, will be reviewed for completeness.

1.16 TRAINED AND COMPETENT PERSONNEL

Work shall be performed by Competent Persons, qualified and trained in the abatement, enclosure, encapsulation, monitoring, testing, storage, treatment, hauling, and disposal of contaminated LBP debris material, and in subsequent cleanup of the affected environment. Workers shall comply with the appropriate Federal, state, and local regulations which mandate training requirements and work practices and shall be capable of performing the work under this contract.

1.17 POSTED WARNINGS AND NOTICES

The following regulations, warnings, and notices shall be posted at the work site in accordance with 29 CFR 1926 Section .62.

1.17.1 Regulations

Two copies of applicable Federal, state, and local regulations and NIOSH OSHA Booklet 3142 shall be maintained. One copy shall be posted at the work site and one copy shall be on file in the project office.

1.17.2 Warning Signs and Labels

Warning signs shall be provided at building entrances and approaches to LBP control areas containing airborne LBP debris. Signs shall be located at a distance from the LBP control areas that will allow personnel to read the sign and take the necessary protective actions required before entering the LBP control area.

1.17.2.1 Warning Signs

Warning signs shall be in English [and be of sufficient size to be clearly legible and display the following:

WARNING
LEAD WORK AREA
POISON
NO SMOKING OR EATING
AUTHORIZED PERSONNEL ONLY
RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA

1.17.2.2 Warning Labels

Warning labels shall be in English and be of sufficient size to be clearly legible and display the following:

CAUTION: CLOTHING CONTAMINATED WITH LEAD. DO NOT REMOVE DUST BY BLOWING OR SHAKING. DISPOSE OF LEAD CONTAMINATED WASH WATER IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE OR LOCAL REGULATIONS.

1.17.3 Worker Information

Right-to-know notices shall be placed in clearly visible areas of the work site in compliance with Federal, state, and local regulations.

1.17.4 Air Monitoring Results

Daily air monitoring results shall be prepared so as to be easily understood by the workers, and shall be placed in a clearly visible area of the work site.

1.17.5 Emergency Telephone Numbers

A list of telephone numbers shall be posted at the site. The list shall include numbers of the local hospital, emergency squad, police and fire departments, Government and Contractor representatives who can be reached 24 hours per day, and professional consultants directly involved in the project.

1.18 EQUIPMENT AND MATERIALS

Sufficient quantities of health and safety materials required by 29 CFR 1926 Section .62, and other materials and equipment needed to complete the project, shall be available and kept on the site.

1.18.1 Respirators

Air-purifying respirators shall be approved by NIOSH for use with dust, fumes, and mists having permissible exposure limits less than 0.05 milligrams per cubic meter (i.e., have high-efficiency particulate air (HEPA) filters) and for other hazardous airborne contaminants that may be encountered, as determined by the Competent Person. Respirators shall comply with the requirements of 29 CFR 1926 Section .62 and shall be used in accordance with 29 CFR 1926 Section .103 and 29 CFR 1910Section .134.

1.18.2 Respirator Cartridges

A sufficient supply of respirator cartridges shall be maintained at the work site to provide new cartridges to employees, authorized visitors, and Government personnel throughout the duration of the project. Cartridges shall be replaced according to the manufacturer's recommendations, when breathing becomes difficult, or if the cartridge becomes wet.

1.18.3 Protective Clothing

The Contractor shall furnish, at no cost to personnel, equipment/clothing for protection from airborne and waterborne LBP debris. An adequate supply of these items shall be available for worker, authorized visitor, and Government personnel use. Workers and visitors shall not take protective clothing and equipment off the work site at any time. Protective clothing includes:

- a. Coveralls (Whole Body Protective Coverings)
- b. Boots: Work boots with nonskid soles or impermeable work boot covers shall be worn by workers. Where required by OSHA, safety boots (steel toe or steel toe and shank) shall be worn.
- c. Gloves: Inner gloves, appropriate for items and hazards encountered, and disposable outer work gloves shall be provided to each worker and shall be worn while the worker is in the work area. Glove material shall be appropriate for the specific chemical exposure. Gloves shall not be removed from the work area, and shall be disposed of as LBP contaminated waste at the end of the work.
- d. Hard Hats: Head protection (hard hats) shall be provided as required by OSHA and EM 385-1-1 for workers and authorized visitors.
- e. Eye Protection: Fog-proof goggles for personnel engaged in LBP abatement operations shall be worn when the use of a full face piece respirator is not required.
- f. Work Clothing: Cloth work clothes shall be provided for wearing under the disposable protective coveralls and foot coverings.

1.18.4 Negative Air Pressure System

When a LBP control area requires the use of an airtight containment barrier, a negative air pressure system shall be used, and pressure differential recordings taken. LBP shall not be removed from the LBP control area until the proper engineer controls and HEPA filtration systems are in place.

1.18.4.1 HEPA Filter Requirements

The negative air pressure system shall be equipped with approved HEPA filters per UL 586. Negative air pressure equipment shall be equipped with new HEPA filters, and shall be sufficient to maintain a minimum pressure differential of minus 0.02 inch of water column relative to adjacent, unsealed areas. Negative air pressure system minimum requirements are listed below.

- a. The unit shall be capable of delivering its rated volume of air with a clean first stage filter, an intermediate filter and a primary HEPA filter in place.
- b. The HEPA filter shall be certified as being capable of removing particles as small as 0.3 micrometers at a minimum efficiency of 99.97 percent.
- c. The unit shall be capable of continuing to deliver no less than 70 percent of rated capacity when the HEPA filter is 70 percent full or measures 2.5 inches of water static pressure differential on a magnehelic gage.
- d. The unit shall be equipped with a manometer-type negative pressure differential monitor with minor scale division of 0.02 inch of water and accuracy within plus or minus 1.0 percent. The manometer shall be calibrated daily as recommended by the manufacturer. Record manually manometer readings of the pressure

differential between the LBP control area and adjacent unsealed areas at the beginning of each workday and every 2 working hours thereafter.

- e. The unit shall be equipped with a means for the operator to easily interpret the readings in terms of the volumetric flow rate of air per minute moving through the machine at any given moment.
- f. The unit shall be equipped with an electronic mechanism that automatically shuts the machine off in the event of a filter breach or absence of a filter.
- g. The unit shall be equipped with an audible horn that sounds an alarm when the machine has shut itself off.
- h. The unit shall be equipped with an automatic safety mechanism that prevents a worker from improperly inserting the main HEPA filter.
- i. The unit shall be ducted through the containment barrier wall to the outside of the building. The unit shall not be exhausted into any work area.

1.18.4.2 Number of Units Required

The air within the containment barrier shall be changed at least once every 15 minutes by a continuously operating negative air pressure system, until the LBP control area barrier is removed. Filters shall be replaced as necessary to maintain the efficiency of the system. A back-up unit shall be maintained onsite.

1.18.4.3 Auxiliary Generator

An auxiliary generator shall be provided with a capacity adequate to power a minimum of 50 percent of the negative air machines at any time during the work. When power fails, the generator controls shall automatically start the generator and switch the negative air pressure system machines to generator power. The generator shall not present a carbon monoxide hazard to workers.

1.18.4.4 Local HVAC Systems

The building heating, ventilating, and air conditioning (HVAC) system shall not be used as the negative air pressure system for the LBP control area.

1.18.4.5 Discontinuing Negative Air Pressure System

The negative air pressure system shall not be shut down during LBP abatement work unless authorized by the Contracting Officer. At the completion of the LBP abatement and disposal project, units shall be run until full cleanup has been completed and wipe clearance samples have been collected, analyzed, and have passed final clearance testing requirements. Dismantling of the negative air pressure systems shall conform to the written decontamination procedures. Prefilters shall be removed and properly disposed of, and the intake to the machines shall be sealed with polyethylene to prevent environmental contamination.

1.18.5 Expendable Supplies

1.18.5.1 Polyethylene Sheet and Bags - General

Polyethylene sheet and bags shall be minimum 6 mils thick. Bags shall have pre-printed labels, and 5 inch (minimum) long plastic ties, pointed and looped to secure the filled bags.

1.18.5.2 Polyethylene Sheet - Flame Resistant

Where a potential for fire exists, flame-resistant polyethylene sheets shall be provided. Polyethylene film shall conform to the requirements of NFPA 701.

1.18.5.3 Polyethylene Sheet - Reinforced

Reinforced polyethylene sheet shall be provided where high skin strength is required such as where it constitutes the only barrier between the LBP control area and the outdoor environment. The sheet stock shall consist of translucent, nylon-reinforced or woven-polyethylene thread laminated between two layers of polyethylene film. Film shall meet flame resistant standards of NFPA 701.

1.18.5.4 Tape and Adhesive Spray

Tape and adhesive shall be capable of sealing joints between polyethylene sheets and for attachment of polyethylene sheets to adjacent surfaces. After dry application, tape or adhesive shall retain adhesion when exposed to wet conditions, including amended water. Tape shall be industrial strength.

1.18.5.5 Containers

Impermeable containers shall be used to receive and retain lead contaminated material until disposal. Containers shall be labeled in accordance with EPA, DOT and OSHA standards.

1.18.5.6 Chemicals

Chemicals, including caustics and paint strippers, shall be properly labeled and stored in leak-tight containers.

1.18.6 Vacuum Systems

HEPA filtered vacuum systems shall be used during abatement operations. The systems shall be suitably sized for the project, and filters shall be capable of removing particles as small as 0.3 micrometers at a minimum efficiency of 99.97 percent.

1.18.7 Heat Blower Guns

Heat blower guns shall be flameless, electrical, paint-softener type with controls to limit temperature to 1,100 degrees F. Heat blower shall be DI (non-grounded) 120 Vac, and shall be equipped with cone, fan, glass protector and spoon reflector nozzles.

1.18.8 Chemical Paint Strippers

Chemical paint strippers shall contain no methylene chloride and shall be formulated to prevent stain, discoloration, or raising of the substrate materials.

1.18.9 Chemical Paint Stripper Neutralizer

Neutralizers for paint strippers shall be used on exteriors only and shall be compatible with the substrate and suitable for use with the chemical stripper that has been applied to the surface.

1.19 STORAGE OF MATERIALS

Materials shall be stored in a place and manner which protects them from damage and contamination. During periods of cold weather, plastic materials shall be protected from the cold. No flammable or hazardous materials shall be stored inside any building. Regularly inspect materials to identify damaged or deteriorating items. Damaged or deteriorated items shall not be used and shall be removed from the site as soon as they are discovered. Any materials which become contaminated with LBP waste shall be disposed of consistent with the requirements of 40 CFR 148 and these specifications. Stored materials shall not present a hazard or an inconvenience to workers, visitors, and/or other occupants and employees of the building.

2 PRODUCTS (NOT APPLICABLE)

3 EXECUTION

3.1 PILOT ABATEMENT PROJECT – NOT USED

3.2 WORK PROCEDURES

LBP abatement and related work shall be performed in accordance with the accepted Contractor's LBP Management Plan as modified and approved. Procedures and equipment required to limit occupational and environmental exposures to lead during LBP removal shall be in accordance with 29 CFR 1926 Section .62, and as specified herein. Paint chips and associated waste shall be disposed of in compliance with Federal, state, and local regulations.

3.2.1 Personnel Protection Procedures

Personnel shall wear and use protective clothing and equipment as specified. Eating, smoking, drinking, chewing tobacco and chewing gum, and applying makeup shall not be permitted in the LBP control area. Personnel of trades not engaged in the abatement and disposal of LBP shall not be exposed at any time to airborne concentrations of lead equal to or in excess of 30 micrograms per cubic meter of air. Electrical service shall be disconnected when wet removal is performed, and temporary electrical service protected by a ground fault circuit interrupter shall be provided.

3.2.2 Safety and Health Procedures

The Competent Person shall be present on the work site throughout the abatement project to supervise, monitor, and document the project's health and safety provisions. A daily log shall be maintained showing the results of sampling tests throughout the project area. LBP abatement work being conducted within a LBP Control area where an airtight barrier is required shall be stopped if dust wipe concentration levels collected outside the containment area during abatement, equal or exceed the preabatement level or 100 micrograms per square foot, whichever is greater.

3.2.3 Safety and Health Responsibilities

The Competent Person shall:

- a. Verify that training meets applicable requirements.
- b. Review and approve LBP Management Plan for conformance to the applicable referenced standards.
- c. Inspect LBP removal work for conformance with the accepted LBP Management Plan.
- d. Ensure that worker exposure air monitoring activities are in accordance with 29 CFR 1926 Section .62.
- e. Ensure work is performed in strict accordance with specifications.
- f. Ensure hazardous exposure to personnel and to the environment are adequately controlled.

The CIH shall be responsible for directing personal and environmental air monitoring. The Contractor shall hire an independent EPA certified lead risk assessor to collect lead dust wipe clearance sampling.

3.2.4 Medical Surveillance Procedures

Medical surveillance shall be implemented in accordance with the approved Contractor's LBP Management Plan, and shall comply with the requirements of 29 CFR 1926 Section .62, including the provisions for biological monitoring, medical removal protection and a physician's written opinion, signed by the physician performing the employee examination. The Contractor shall provide a copy of the written opinion for Contractor's employees 2 days prior to each employee's commencement of work.

3.2.5 Engineering Controls and Containment Structures

3.2.5.1 LBP Control Area

The LBP control area is where LBP abatement work occurs and as such shall be considered contaminated, and shall be isolated to prevent LBP containing dust or debris from passing into adjacent building or open areas. The control area shall be decontaminated at the completion of the LBP abatement and disposal work.

3.2.5.2 Boundary Requirements

Physical boundaries shall be provided around exterior LBP control areas by roping off the area indicated in the LBP Management Plan. Interior projects shall be isolated by curtains, portable partitions, or other enclosures to ensure that concentrations of lead dust outside the LBP control area will not equal or exceed the preabatement level or 100 micrograms per square foot, whichever is greater.

3.2.5.3 Control Barriers

The LBP control area shall be separated from other portions of the building and the outside with control barriers. The polyethylene sheeting will have all openings masked and sealed, and shall be erected according to the Contractor's LBP Management Plan. Polyethylene sheeting shall be mechanically supported, independent of duct tape or spray adhesive.

3.2.5.4 Preabatement Lead-Dust Wipe Samples

Preabatement lead-dust wipe samples shall be taken outside the LBP controlled area, in accordance with HUD-01. Samples shall be taken within 10 feet of the abatement structure at 20 percent of the area planned for abatement.

3.2.5.5 Masking and Sealing

- a. Interior LBP control area requirements: Openings shall be sealed where the release of airborne LBP dust is expected. A control area shall be established with the use of curtains, portable partitions, or other systems in order to prevent the escape of dust from the contaminated control area. The control area shall be provided with protective covering of two layers of polyethylene sheeting over floors. Penetrations of the floor, walls, and ceiling shall be sealed with polyethylene sheeting and duct tape. Polyethylene sheeting shall be firmly attached to the structure. Joints shall be sealed with spray adhesive and duct tape. Openings shall be provided for the supply and exhaust of air for the negative air pressure system. Personal monitoring during the work shift shall be in accordance with 29 CFR 1926 Section .62.
- b. Exterior LBP control area requirements: Where the construction of a contained LBP control area is impractical, a roped-off perimeter shall be installed 20 feet from, and around, the area where the LBP handling procedures are performed and other requirements for LBP control areas shall be maintained. Personal monitoring of airborne concentrations shall be conducted in adjacent areas, during the work shift, in accordance with 29 CFR 1926 Section .62. Where wipe sampling is not practical, air monitoring outside of the roped-off perimeter shall be conducted as specified. Airborne concentrations shall not exceed specified levels.

3.2.5.6 Personnel Decontamination Unit Procedures

Decontamination units shall be constructed when required for the abatement procedures.

3.2.5.7 Clean Room Procedures

The clean room shall have only one exit to non-contaminated areas of the building or site.

3.2.5.8 Hand Wash Station/Shower Room Procedures

An operational shower and hand washing station shall be provided between the work area and the clean changing room. Workers shall wash and/or shower before entering the clean changing room. Waste water shall be pumped to drain and through waste water filters that meet state and/or local requirements. These filters shall be located inside the shower unit and filters shall be changed regularly. Spent filters shall be discarded as LBP contaminated waste.

3.2.5.9 Equipment Decontamination Unit Procedures

The Equipment Decontamination Unit shall be used for removal of equipment and materials from the LBP control area, and shall include a wash room, holding room, and an enclosed walkway.

3.2.5.10 Maintenance of Decontamination Units

Barriers and polyethylene sheeting shall be effectively sealed and taped. Containment barriers shall be visually inspected at the beginning of each work period. Damaged barriers and defects shall be immediately repaired upon discovery. Smoke methods shall be used to test effectiveness of barriers when directed by the Contracting Officer.

3.2.5.11 LBP Control Area Exiting Procedures

Personnel exiting a LBP control area shall perform the following procedures and shall not leave the work place wearing any clothing or equipment worn during the work day:

- a. Vacuum all protective clothing before removing.
- b. Remove protective clothing in the decontamination room, and place this clothing in an approved impermeable disposal bag.
- c. Wash or shower.
- d. Change to clean clothes prior to leaving the physical boundary designated around the lead-contaminated work site.

3.2.6 Furnishings

The Contractor shall remove furniture and equipment from the work area before LBP removal work begins.

3.2.7 Building Ventilating Systems

Any building ventilating system or any other system bringing air into or out of the LBP control work area shall be isolated by airtight seals, or other positive means that will prevent spread of contamination through the system. Airtight seals shall consist of rigid covers for supply and

exhaust grills and 2 layers of polyethylene. Individual seals shall be applied to ventilation openings (supply and exhaust), lighting fixtures, clocks, windows, doorways, elevator doors, stairs, ramps, speakers, and other openings into the work area. Seals shall be maintained until project decontamination is completed. After decontamination work has been completed and final air sample testing proves that the area is decontaminated, seals shall be removed and the ventilating systems may be operated again.

3.2.8 Temporary Utilities

Temporary equipment to provide adequate power, light, heat, and water shall be installed, if required, to accomplish the abatement operations properly and safely. The Contractor shall maintain the security and maintenance of the utility system in the LBP control areas. In the event of a failure of any utility system, the Government will not be responsible for any loss of time or other expense incurred by the Contractor. Wiring and electrical service shall be as specified in to Section 16415 Electrical Work, Interior or Section 16370 Electrical Distribution System, Aerial. The Contractor shall coordinate with the COR to determine if Government furnished power and water are available.

3.3 LBP ABATEMENT METHODS

3.3.1 Chemical Stripping

LBP may be removed by using approved chemical strippers if approved by the Contracting Officer. Chemical strippers containing methylene chloride are prohibited. Stripping shall be done according to manufacturer's recommendations. Substrates shall be thoroughly washed and neutralized before applying a primer or sealing coat. Waste generated by the stripping process shall be handled in accordance with the Hazardous Waste Management Plan. Adjacent walls and floors shall be protected to prevent contamination.

3.3.2 Hand-Scraping with a Heat Gun

LBP may be removed by hand-scraping with a heat gun. Paint residue shall be handled in accordance with the Hazardous Waste Management Plan. Heat guns shall be operated below 1,100 degrees F to prevent possible release of toxic fumes or starting a fire.

3.3.3 Vacuum Blasting

LBP may be removed by vacuum blasting techniques with the device fitted to HEPA vacuum systems. Work shall be performed in a LBP control area using negative pressure full containment with HEPA filtered exhaust. Paint residue shall be handled in accordance with the Hazardous Waste Management Plan.

3.3.4 Needle Gun or grinder

LBP may be removed by either needle gun or grinder with the device fitted to HEPA vacuum systems. Work shall be performed in a LBP control area using negative pressure full containment with HEPA filtered exhaust. Paint residue shall be handled in accordance with the Hazardous Waste Management Plan.

3.4 MONITORING

During the entire LBP removal and disposal operations, a Competent Person shall be onsite directing the monitoring/sampling and inspecting the work to ensure that the health and safety requirements of this contract are satisfied.

3.4.1 Personal Air Monitoring

Airborne concentrations of lead shall be collected and analyzed in accordance with 29 CFR 1926 Section .62. Results shall be reported in micrograms per cubic meter of air. The Competent Person shall use personal air monitoring results to determine the effectiveness of engineering controls, the adequacy of PPE and to determine if proper work practices are being employed. The Contracting Officer shall be notified if any personal air monitoring result equals or exceeds 30 micrograms per cubic meter of air. The Contractor shall take steps to reduce the concentration of lead in the air.

3.4.2 Wipe Sampling

Wipe sampling shall be performed only by an independent EPA Certified Risk Assessor. Wipe sampling for lead dust concentrations shall be conducted:

- a. Preabatement to establish a baseline.
- b. During abatement to monitor activities and ensure containment integrity.
- c. Post abatement to determine if specified clearance criteria has been met.

3.4.2.1 Preabatement

Preabatement wipe samples shall be collected outside the LBP control area in accordance with paragraph Preabatement Lead-Dust Wipe Samples. Samples outside the LBP control work area shall be collected at critical barriers, in the clean room of the decontamination unit and in traffic control areas such as personal and equipment entrances.

3.4.2.2 Abatement

The Competent Person shall collect wipe samples during all LBP abatement activities on a daily basis. The samples shall be collected outside the LBP control area in accordance with paragraph Preabatement Lead-Dust Wipe Samples. Samples shall be collected outside the LBP control work area at critical barriers, in the clean room of the decontamination unit and in traffic control areas such as personal and equipment entrances.

3.4.2.3 Results

The Contractor shall have the results of the wipe sampling within 48 hours after the completion of the sampling. Results shall be reported in micrograms per square foot.

3.4.2.4 Excessive Levels

LBP abatement work being conducted within a LBP control area shall be stopped if measured dust wipe concentration levels collected outside the containment area, during abatement,

equal or exceed the preabatement levels or 100 micrograms per square foot, whichever is greater. The Contractor shall immediately notify the Contracting Officer. At the direction of the Contracting Officer, the Contractor shall clean outside areas which equal or exceed the levels stated above, at no additional cost to the Government. The cleaning shall be in accordance with paragraph CLEANUP AND DISPOSAL, prior to clearance. The Contractor shall collect and have analyzed additional wipe samples at no charge to the Government to ensure the areas are clean. Cleaning and resampling shall continue until levels as stated above are achieved. The Contractor shall correct containment and/or work practices to mitigate the problem. Removal work shall resume when approval is given by the Contracting Officer.

3.4.2.5 Post Abatement

Post abatement samples shall be collected in accordance with paragraph Final Clearance Testing.

3.4.3 Area Air Monitoring

Where wipe samples are not practical (exterior abatement work) Airborne concentrations of lead shall be collected and analyzed in accordance with 29 CFR 1926 Section .62. Results shall be reported in micrograms per cubic meter of air.

3.4.3.1 Preabatement

Preabatement samples shall be collected in the following locations outside the work area; one upwind of the abatement and two downwind of the abatement activities.

3.4.3.2 Abatement

The Competent Person shall collect area air samples on a daily basis. The samples shall be collected in the same location as the preabatement samples.

3.4.3.3 Results

The Contractor shall have the results of the area air monitoring within 48 hours after completion of the sampling. Results shall be reported in micrograms per cubic meter of air.

3.4.3.4 Excessive Levels

Outdoor LBP abatement shall cease and the Contracting Officer notified if measured airborne lead concentrations, collected during abatement, exceed the preabatement airborne concentration levels. The Contractor may be required to clean and resample the effected area, at no additional cost to the Government, if directed by the Contracting Officer. The Contractor shall correct the work practices and/or engineering controls and shall resume abatement at the direction of the Contracting Officer.

3.4.4 Waste Sampling and Testing

Sampling and testing of all waste shall be in accordance with 40 CFR 261.

3.5 ADJACENT AREAS

Damage to adjacent areas shall be repaired to the approval of the Contracting Officer.

3.6 CLEANUP AND DISPOSAL

3.6.1 Cleanup

3.6.1.1 Daily

Surfaces in the LBP control area shall be maintained free of accumulations of paint chips and dust. Spread of dust and debris shall be restricted; waste shall not be distributed over the work area. Dry sweep or compressed air shall not be used for cleanup. At the end of each shift, the area shall be cleaned of visible lead paint contamination by vacuuming with a HEPA filtered vacuum cleaner and wet mopping the area. LBP abatement work shall cease during the cleanup.

3.6.1.2 Prior to Clearance

Upon completion of the lead paint abatement and a satisfactory visual inspection by the Contracting Officer in a given work area, a preliminary clean-up shall be performed by the Contractor per HUD guidelines. This clean-up includes removal of any contaminated material, equipment or debris including polyethylene sheeting from the work area, except for critical barriers. The polyethylene sheeting shall be sprayed or misted with water for dust control, abatement debris removed and then the sheeting removed by folding it in upon itself. Polyethylene sheeting used for critical barriers shall remain in place until final clearance criteria.

3.6.2 Visual Inspection

Upon completion of the final cleaning, the Contractor shall notify the Contracting Officer and request a final visual inspection with the Contracting Officer's representative with the criteria in the final cleaning/visual inspection example format sheet located at the end of this section. If the area does not pass the visual inspection, the Contractor shall reclean the area as required by paragraph CLEANUP AND DISPOSAL, at no additional expense to the Government. Final clearance testing shall not proceed until the Contracting Officer has accepted the final cleaning by the Contractor.

3.6.3 Final Clearance Testing

Final clearance surface dust sampling in accordance with HUD-01 shall be conducted after a thorough cleanup has been completed in accordance with the following:

- a. Onsite paint removal: one wipe sample of the floor within each containment area and outside the containment area within ten feet of the abated area.

Retests. Should laboratory results indicate that the wipe test clearance level is exceeded, the Contractor shall reclean the affected area, at no additional cost to the Government. The Contractor shall utilize specified cleaning methods. Retesting will then be performed to determine if specified clearance criteria was met. The Contractor shall pay for additional

testing and shall provide, at no additional cost, a recleaning of an affected area until the clearance level is achieved.

3.6.4 Certification

The Competent Person shall certify in writing that inside the LBP control area and the area external to the LBP control area met final clearance requirements.

3.6.5 Removal of Control Area

After approval of the final clearance certification, and when authorized by the Contracting Officer, the LBP control area, containment barriers, and control structures roped-off boundary and warning signs shall be removed.

3.6.6 Disposal

3.6.6.1 Toxicity Characteristic Leaching Procedure (TCLP) Results

The results of the TCLP analysis performed during abatement shall be used to determine disposal procedures.

3.6.6.2 Contaminated Waste

Lead-contaminated waste, scrap, and debris shall be disposed of as follows:

- a. Lead-contaminated hazardous-waste shall be handled, stored, transported, and disposed of in accordance with 40 CFR 260, 40 CFR 261, 40 CFR 262, 40 CFR 263, 40 CFR 264, and 40 CFR 265. Land disposal restriction notification shall be as required by 40 CFR 268.
- b. Non-hazardous lead wastes (<5 mg/L TCLP) shall be disposed according to appropriate state and local regulations.

3.6.7 Disposal Documentation

Written evidence shall be provided that the hazardous waste treatment, storage, or disposal facility is approved for lead disposal by the EPA and state or local regulatory agencies. One copy shall be submitted of the completed manifest; signed, and dated by the initial transporter in accordance with 40 CFR 262.

3.6.8 Title to Materials

Materials resulting from demolition work, except as specified otherwise, shall become the property of the Contractor, and shall be disposed of in as specified herein.

3.6.9 Payment for Hazardous Waste

Payment for disposal of hazardous waste will not be made until a signed copy of the manifest from the treatment or disposal facility certifying the amount of lead-containing materials delivered is returned and a copy is furnished to the Government.

CERTIFICATION OF FINAL CLEANING AND VISUAL INSPECTION

Individual abatement task as identified in paragraph,

Description of Work _____

In accordance with the clearing and decontamination procedures specified in the Contractor's lead hazard abatement plan and this contract, the Contractor hereby certifies that he/she has thoroughly visually inspected the decontaminated regulated work area (all surfaces, including pipes, beams, ledges, walls, ceiling, floor, decontamination unit, etc.) and has found no dust, debris, or lead containing material residue.

BY: (Contractor's signature) _____ Date _____

Print name and title _____

(Contractor's Onsite Supervisor signature) _____ Date _____

Print name and title _____

(Contractor's Competent Person signature) _____ Date _____

Print name and title _____

CONTRACTING OFFICER ACCEPTANCE OR REJECTION

The Contracting Officer hereby determines that the Contractor has performed final cleaning and visual inspection of the decontaminated regulated work area (all surfaces including pipes, beams, ledges, walls, ceiling, floor, decontamination unit, etc.) and by quality assurance inspection, finds the Contractor's final cleaning to be:

_____ Acceptable

_____ Unacceptable, Contractor instructed to reclean the LBP control work area

BY: Contracting Officer's Representative

Signature _____

Date _____

Print name and title _____

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SECTION 05101

METALWORK FABRICATION, MACHINE WORK, MISCELLANEOUS PROVISIONS

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(NOT USED)

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SECTION 05101

METALWORK FABRICATION, MACHINE WORK, MISCELLANEOUS PROVISIONS

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)

ASME BPVC IX (1998) Boiler and Pressure Vessel Code; Section IX, Welding and Brazing Qualifications

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM A 514/A 514M (1994) High-Yield-Strength, Quenched and Tempered Alloy Steel Plate, Suitable for Welding

ASTM E 165 (1995) Liquid Penetrant Examination Inspection Method

ASTM E 709 (1995) Magnetic Particle Examination

AMERICAN WELDING SOCIETY (AWS)

AWS D1.1 (2000) Structural Welding Code - Steel

1.2 SUBMITTALS

Government approval is required for all submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL OF CONTRACT DATA.

SD-04 Drawings

Detail Drawings; GA.

Detail drawings for metalwork and machine work shall be submitted and approved prior to fabrication.

SD-08 Statements

Welding Procedures for Structural Steel; GA.

Schedules of welding procedures for steel structures shall be submitted and approved prior to commencing fabrication.

Structural Steel Welding Repairs; GA.

Welding repair plans for steel shall be submitted and approved prior to making repairs.

SD-09 Reports

Tests, Inspections, and Verifications; FIO.

Certified test reports for materials shall be submitted with all materials delivered to the site.

SD-13 Certificates

Qualification of Welders and Welding Operators; FIO.

Certifications for welders and welding operators shall be submitted prior to commencing fabrication.

1.3 METALWORK AND MACHINE WORK DETAIL DRAWINGS

Detail drawings for metalwork and machine work shall include catalog cuts, templates, fabrication and assembly details and type, grade and class of material as appropriate. Elements of fabricated items inadvertently omitted on contract drawings shall be detailed by the fabricator and indicated on the detail drawings.

1.4 QUALIFICATION OF WELDERS AND WELDING OPERATORS

The Contractor shall certify that the welders, welding operators and tack welders who will perform structural steel welding have been qualified for the particular type of work to be done in accordance with the requirements of AWS D1.1, or ASME BPVC IX, Section IX, prior to commencing fabrication. The certificate shall list the qualified welders by name and shall specify the code and procedures under which qualified and the date of qualification. Prior qualification will be accepted if welders have performed satisfactory work under the code for which qualified within the preceding three months. The Contractor shall require welders to repeat the qualifying tests when their work indicates a reasonable doubt as to proficiency. Those passing the requalification tests will be recertified. Those not passing will be disqualified until passing. All expenses in connection with qualification and requalification shall be borne by the Contractor.

PART 2 PRODUCTS

2.1 FABRICATION

2.1.1 Structural Fabrication

Material must be straight before being laid off or worked. If straightening is necessary it shall be done by methods that will not impair the metal. Sharp kinks or bends shall be cause for rejection of the material. Material with welds will not be accepted except where welding is definitely specified, indicated on the drawings or otherwise approved. Bends shall be made by approved dies, press brakes or bending rolls. Where heating is required, precautions shall be taken to avoid overheating the metal and it shall be allowed to cool in a manner that will not impair the original properties of the metal. Proposed flame cutting of material other than structural steel shall be subject to approval and shall be indicated on detail drawings. Shearing shall be accurate and all portions of the work shall be neatly finished. Corners shall be square and true unless otherwise shown on the drawings. Re-entrant cuts shall be filleted to a minimum radius of 3/4 inch unless otherwise approved. Finished members shall be free of twists, bends and open joints. Bolts, nuts and screws shall be tight.

2.1.1.1 Dimensional Tolerances for Structural Work

Dimensions shall be measured by an approved calibrated steel tape of approximately the same temperature as the material being measured. The overall dimensions of an assembled structural unit shall be within the tolerances indicated on the drawings or as specified in the particular section of these specifications for the item of work. Where tolerances are not specified in other sections of these specifications or shown on the drawings, an allowable variation of 1/32 inch is permissible in the overall length of component members with both ends milled and component members without milled ends shall not deviate from the dimensions shown on the drawings by more than 1/16 inch for members 30 feet or less in length and by more than 1/8 inch for members over 30 feet in length.

2.1.1.2 Structural Steel Fabrication

Structural steel may be cut by mechanically guided or hand-guided torches, provided an accurate profile with a surface that is smooth and free from cracks and notches is obtained. Surfaces and edges to be welded shall be prepared in accordance with AWS D1.1, Subsection 3.2. Where structural steel is not to be welded, chipping or grinding will not be required except as necessary to remove slag and sharp edges of mechanically guided or hand-guided cuts not exposed to view. Hand-guided cuts which are to be exposed or visible shall be chipped, ground or machined to sound metal.

2.1.2. Welding

2.1.2.1 Welding of Structural Steel

a. Welding Procedures for Structural Steel

Welding procedures for structural steel shall be prequalified as described in AWS D1.1, Subsection 5.1 or shall be qualified by tests as prescribed in AWS D1.1, Section 5. Properly

documented evidence of compliance with all requirements of these specifications for previous qualification tests shall establish a welding procedure as prequalified. For welding procedures qualified by tests, the test welding and specimen testing must be witnessed and the test report document signed by the Contracting Officer. Approval of any welding procedure will not relieve the Contractor of the responsibility for producing a finished structure meeting all requirements of these specifications. The Contractor will be directed or authorized to make any changes in previously approved welding procedures that are deemed necessary or desirable by the Contractor Officer. The Contractor shall submit a complete schedule of welding procedures for each steel structure to be welded. The schedule shall conform to the requirements specified in the provisions AWS D1.1, Sections 2, 3, 4, 7 and 9 and applicable provisions of Section 10. The schedule shall provide detailed procedure specifications and tables or diagrams showing the procedures to be used for each required joint. Welding procedures must include filler metal, preheat, interpass temperature and stress-relief heat treatment requirements. Each welding procedure shall be clearly identified as being prequalified or required to be qualified by tests. Welding procedures must show types and locations of welds designated on the drawings or in the specifications to receive nondestructive examination.

b. Welding Process

Welding of structural steel shall be by an electric arc welding process using a method which excludes the atmosphere from the molten metal and shall conform to the applicable provisions of AWS D1.1, Sections 1 through 7, 9, 10 and 11. Welding shall be such as to minimize residual stresses, distortion and shrinkage.

c. Welding Technique

(1) Filler Metal

The electrode, electrode-flux combination and grade of weld metal shall conform to the appropriate AWS specification for the base metal and welding process being used or shall be as shown on the drawings where a specific choice of AWS specification allowables is required. The AWS designation of the electrodes to be used shall be included in the schedule of welding procedures. Only low hydrogen electrodes shall be used for manual shielded metal-arc welding regardless of the thickness of the steel. A controlled temperature storage oven shall be used at the job site as prescribed by AWS D1.1, Subsection 4.5 to maintain low moisture of low hydrogen electrodes.

(2) Preheat and Interpass Temperature

Preheating shall be performed as required by AWS D1.1, Subsection 4.2 and 4.3 or as otherwise specified except that the temperature of the base metal shall be at least 20 degrees C (70 degrees F). The weldments to be preheated shall be slowly and uniformly heated by approved means to the prescribed temperature, held at that temperature until the welding is completed and then permitted to cool slowly in still air.

(3) Stress-Relief Heat Treatment

Where stress relief heat treatment is specified or shown on the drawings, it shall be in accordance with the requirements of AWS D1.1, Subsection 4.4 unless otherwise authorized or directed by the Contracting Officer.

d. Workmanship

Workmanship for welding shall be in accordance with AWS D1.1, Section 3 and other applicable requirements of these specifications.

(1) Preparation of Base Metal

Prior to welding the Contractor shall inspect surfaces to be welded to assure compliance with AWS D1.1, Subsection 3.2.

(2) Temporary Welds

Temporary welds required for fabrication and erection shall be made under the controlled conditions prescribed herein for permanent work. Temporary welds shall be made using low-hydrogen welding electrodes and by welders qualified for permanent work as specified in these specifications. Preheating for temporary welds shall be as required by AWS D1.1 for permanent welds except that the minimum temperature shall be 120 degrees F in any case. In making temporary welds arcs shall not be struck in other than weld locations. Each temporary weld shall be removed and ground flush with adjacent surfaces after serving its purpose.

(3) Tack Welds

Tacks welds that are to be incorporated into the permanent work shall be subject to the same quality requirements as the permanent welds and shall be cleaned and thoroughly fused with permanent welds. Preheating shall be performed as specified above for temporary welds. Multiple-pass tack welds shall have cascaded ends. Defective tack welds shall be removed before permanent welding.

2.2 TESTS, INSPECTIONS, AND VERIFICATIONS

The Contractor shall have required material tests and analyses performed and certified by an approved laboratory to demonstrate that materials are in conformity with the specifications. These tests and analyses shall be performed and certified at the Contractor's expense. Tests shall conform to the requirements of the particular sections of these specifications for the respective items of work unless otherwise specified or authorized. Tests shall be conducted in the presence of the Contracting Officer if so required. The Contractor shall furnish specimens and samples for additional independent tests and analyses upon request by the Contracting Officer. Specimens and samples shall be properly labeled and prepared for shipment.

2.2.1 Nondestructive Testing

When doubt exists as to the soundness of any material part, such part may be subjected to any form of nondestructive testing determined by the Contracting Officer. This may include

ultrasonic, magnaflux, dye penetrant, x-ray, gamma ray or any other test that will thoroughly investigate the part in question. The cost of such investigation will be borne by the Government. Any defects will be cause for rejection and rejected parts shall be replaced and retested at the Contractor's expense.

2.2.2 Inspection of Structural Steel Welding

The Contractor shall maintain an approved inspection system and perform required inspections in accordance with paragraph CONTRACTOR INSPECTION SYSTEM of the CONTRACT CLAUSES of this contract. Welding shall be subject to inspection by the Contracting Officer to determine conformance with the requirements of AWS D1.1, the approved welding procedures and provisions stated in other sections of these specifications. The Contracting Officer may require nondestructive examination of designated welds and may require supplemental examination of any joint or coupon cut from any location in any joint.

2.2.2.1 Visual Examination

All completed welds shall be cleaned and carefully examined for insufficient throat or leg sizes, cracks, undercutting, overlap, excessive convexity or reinforcement and other surface defects to ensure compliance with the requirements of AWS D1.1, Section 3 and Section 9, Part D.

2.2.2.2 Nondestructive Examination

The nondestructive examination of shop and field welds shall be performed as designated on the drawings or described in the sections of these specifications covering the particular items of work.

a. Testing Agency - The nondestructive examination of welds and the evaluation of examination tests as to the acceptability of the welds shall be performed by a testing agency adequately equipped and competent to perform such services or by the Contractor using suitable equipment and qualified personnel. In either case the Contracting Officer's written approval of the examination procedures is required and the examination tests shall be made in the presence of the Contracting Officer. The evaluation of examination tests shall be subject to the approval of the Contracting Officer and all records shall become the property of the Government.

b. Examination Procedures

(1) Ultrasonic Testing

Making, evaluating and reporting ultrasonic testing of welds shall conform to the requirements of AWS D1.1, Section 6, Part C. The ultrasonic equipment shall be capable of making a permanent record of the test indications. A record shall be made of each weld tested.

(2) Radiographic Testing

Making, evaluating and reporting radiographic testing of welds shall conform to the requirements of AWS D1.1, Section 6, Part B.

(3) Magnetic Particle Inspection

Magnetic particle inspection of welds shall conform to the applicable provisions of ASTM E 709.

(4) Dye Penetrant Inspection

Dye penetrant inspection of welds shall conform to the applicable provisions of ASTM E 165.

c. Acceptability of Welds - Welds shall be unacceptable if shown to have defects prohibited by AWS D1.1, Subsection 9.25 or possess any degree of incomplete fusion, inadequate penetration or undercutting.

d. Welds to be Subject to Nondestructive Examination

The welds requiring nondestructive examination will be those shown on the drawings using the appropriate designation of AWS A2.4 "Standard Symbols for Welding, Brazing and Nondestructive Examination". Spot nondestructive examination of welds shall be used to ensure adequate welding quality and water tightness of seams, and as a minimum the following amount of non-destructive inspection shall be performed:

(1) Ten percent of the full penetration welds shall be inspected by ultrasonic testing.

(2) Ten percent of the groove welds shall be inspected by ultrasonic testing.

(3) Ten percent of the fillet welds shall be inspected by magnetic testing or liquid penetrant testing.

(4) The samples shall be randomly selected and shall be representative of the welds on that weldment.

2.2.2.3 Test Coupons

The Government reserves the right to require the Contractor to remove coupons from completed work when doubt as to soundness cannot be resolved by nondestructive examination. Should tests of any two coupons cut from the work of any welder show strengths less than that specified for the base metal it will be considered evidence of negligence or incompetence and such welder shall be removed from the work. When coupons are removed from any part of a structure the members cut shall be repaired in a neat manner with joints of the proper type to develop the full strength of the members. Repaired joints shall be peened as approved or directed to relieve residual stress. The expense for removing and testing coupons, repairing cut members and the nondestructive examination of repairs shall be borne by the Government or the Contractor in accordance with the paragraph INSPECTION AND ACCEPTANCE of the CONTRACT CLAUSES of this contract.

2.2.2.4 Supplemental Examination

When the soundness of any weld is suspected of being deficient due to faulty welding or stresses that might occur during shipment or erection the Government reserves the right to perform supplemental nondestructive examinations before final acceptance. The cost of such inspection will be borne by the Government.

2.2.3 Structural Steel Welding Repairs

Defective welds shall be repaired in accordance with AWS D1.1, Subsection 3.7. Defective weld metal shall be removed to sound metal by use of air carbon-arc or oxygen gouging. Oxygen gouging shall not be used on ASTM A 514 steel. The surfaces shall be thoroughly cleaned before welding. Welds that have been repaired shall be retested by the same methods used in the original inspection. Except for the repair of members cut to remove test coupons and found to have acceptable welds costs of repairs and retesting shall be borne by the Contractor.

PART 3 EXECUTION (Not Used)

SECTION 13280

ASBESTOS ABATEMENT

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SECTION 13280

ASBESTOS ABATEMENT

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI Z9.2	(1979; R 1991) Fundamentals Governing the Design and Operation of Local Exhaust Systems
ANSI Z87.1	(1989; Errata; Z87.1a) Occupational and Educational Eye and Face Protection
ANSI Z88.2	(1992) Respiratory Protection

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM C 732	(1995) Aging Effects of Artificial Weathering on Latex Sealants
ASTM D 522	(1993a) Mandrel Bend Test of Attached Organic Coatings
ASTM D 1331	(1989; R 1995) Surface and Interfacial Tension of Solutions of Surface-Active Agents
ASTM D 2794	(1993) Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact)
ASTM D 4397	(1996) Polyethylene Sheeting for Construction, Industrial, and Agricultural Applications
ASTM E 84	(1996a) Surface Burning Characteristics of Building Materials
ASTM E 96	(1995) Water Vapor Transmission of Materials
ASTM E 119	(1995a) Fire Tests of Building Construction and Materials
ASTM E 736	(1992) Cohesion/Adhesion of Sprayed Fire-Resistive Materials Applied to Structural Members

ASTM E 1368	(1997) Visual Inspection of Asbestos Abatement Projects
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CODE OF FEDERAL REGULATIONS (CFR)

29 CFR 1910	Occupational Safety and Health Standards
29 CFR 1926	Safety and Health Regulations for Construction
40 CFR 61	National Emissions Standards for Hazardous Air Pollutants
40 CFR 763	Asbestos
42 CFR 84	Approval of Respiratory Protective Devices
49 CFR 107	Hazardous Materials Program Procedures
49 CFR 171	General Information, Regulations and Definitions
49 CFR 172	Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements
49 CFR 173	Shippers - General Requirements for Shipments and Packagings

COMPRESSED GAS ASSOCIATION (CGA)

CGA G-7	(1990) Compressed Air for Human Respiration
CGA G-7.1	(1989) Commodity Specification for Air

ENGINEERING MANUALS (EM)

EM 385-1-1	(1996) Safety and Health Requirements Manual
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ENVIRONMENTAL PROTECTION AGENCY (EPA)

EPA 340/1-90-018	(1990) Asbestos/NESHAP Regulated Asbestos Containing Materials Guidance
EPA 340/1-90-019	(1990) Asbestos/NESHAP Adequately Wet Guidance
EPA 560/5-85-024	(1985) Guidance for Controlling Asbestos-Containing Materials in Buildings

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 701	(1996) Methods of Fire Test for Flame-Resistant Textiles and Films
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NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH (NIOSH)

NIOSH Pub No. 84-100 (1984; Supple 1985, 1987, 1988 & 1990) NIOSH
Manual of Analytical Methods

UNDERWRITERS LABORATORIES (UL)

UL 586 (1996) High-Efficiency, Particulate, Air Filter Units

WASHINGTON STATE ADMINISTRATIVE CODE (WAC)

296-62 (1997) Asbestos, Tremolite, Anthophyllite, and Actinolite

296-65 (1996) Asbestos Removal and Encapsulation

MONTANA ADMINISTRATIVE RULES

17.74 (1996) Chapter 74 Occupational Health. Requirements
of accreditation and Permitting for Persons Engaged in
an Asbestos-Type Occupation.

OREGON ADMINISTRATIVE RULES

Division 248 (2000) Asbestos Regulations.

1.2 DEFINITIONS

- a. Adequately Wet: A term defined in 40 CFR 61, Subpart M, and EPA 340/1-90-019 meaning to sufficiently mix or penetrate with liquid to prevent the release of particulate. If visible emissions are observed coming from asbestos-containing material (ACM), then that material has not been adequately wetted. However, the absence of visible emissions is not sufficient evidence of being adequately wetted.
- b. Aggressive Method: Removal or disturbance of building material by sanding, abrading, grinding, or other method that breaks, crumbles, or disintegrates intact asbestos-containing material (ACM).
- c. Amended Water: Water containing a wetting agent or surfactant with a surface tension of at least 29 dynes per square centimeter when tested in accordance with ASTM D 1331.
- d. Asbestos: Asbestos includes chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, actinolite asbestos, and any of these minerals that have been chemically treated and/or altered.
- e. Asbestos-Containing Material (ACM): Any materials containing more than one percent asbestos.
- f. Asbestos Fiber: A particulate form of asbestos, 5 micrometers or longer, with a length-to-width ratio of at least 3 to 1.

- g. Authorized Person: Any person authorized by the Contractor and required by work duties to be present in the regulated areas.
- h. Building Inspector: Individual who inspects buildings for asbestos and has EPA Model Accreditation Plan (MAP) "Building Inspector" training; accreditation required by 40 CFR 763, Subpart E, Appendix C.
- i. Certified Industrial Hygienist (CIH): An Industrial Hygienist certified in the practice of industrial hygiene by the American Board of Industrial Hygiene.
- j. Class I Asbestos Work: Activities defined by OSHA involving the removal of thermal system insulation (TSI) and surfacing ACM.
- k. Class II Asbestos Work: Activities defined by OSHA involving the removal of ACM which is not thermal system insulation or surfacing material. This includes, but is not limited to, the removal of asbestos- containing wallboard, floor tile and sheeting, roofing and siding shingles, and construction mastic. Certain "incidental" roofing materials such as mastic, flashing and cements when they are still intact are excluded from Class II asbestos work. Removal of small amounts of these materials which would fit into a glovebag may be classified as a Class III job.
- l. Class III Asbestos Work: Activities defined by OSHA that involve repair and maintenance operations, where ACM, including TSI and surfacing ACM, is likely to be disturbed. Operations may include drilling, abrading, cutting a hole, cable pulling, crawling through tunnels or attics and spaces above the ceiling, where asbestos is actively disturbed or asbestos-containing debris is actively disturbed.
- m. Class IV Asbestos Work: Maintenance and custodial construction activities during which employees contact but do not disturb ACM and activities to clean-up dust, waste and debris resulting from Class I, II, and III activities. This may include dusting surfaces where ACM waste and debris and accompanying dust exists and cleaning up loose ACM debris from TSI or surfacing ACM following construction.
- n. Clean room: An uncontaminated room having facilities for the storage of employees' street clothing and uncontaminated materials and equipment.
- o. Competent Person: In addition to the definition in 29 CFR 1926, Section .32(f), a person who is capable of identifying existing asbestos hazards as defined in 29 CFR 1926, Section .1101, selecting the appropriate control strategy, has the authority to take prompt corrective measures to eliminate them and has EPA Model Accreditation Plan (MAP) "Contractor/Supervisor" training; accreditation required by 40 CFR 763, Subpart E, Appendix C.
- p. Contractor/Supervisor: Individual who supervises asbestos abatement work and has EPA Model Accreditation Plan "Contractor/Supervisor" training; accreditation required by 40 CFR 763, Subpart E, Appendix C.
- q. Critical Barrier: One or more layers of plastic sealed over all openings into a regulated area or any other similarly placed physical barrier sufficient to prevent airborne asbestos in a regulated area from migrating to an adjacent area.

- r. Decontamination Area: An enclosed area adjacent and connected to the regulated area and consisting of an equipment room, shower area, and clean room, which is used for the decontamination of workers, materials, and equipment that are contaminated with asbestos.
- s. Demolition: The wrecking or taking out of any load-supporting structural member and any related razing, removing, or stripping of asbestos products.
- t. Disposal Bag: A 6 mil thick, leak-tight plastic bag, pre-labeled in accordance with 29 CFR 1926, Section .1101, used for transporting asbestos waste from containment to disposal site.
- u. Disturbance: Activities that disrupt the matrix of ACM, crumble or pulverize ACM, or generate visible debris from ACM. Disturbance includes cutting away small amounts of ACM, no greater than the amount which can be contained in 1 standard sized glovebag or waste bag, not larger than 60 inches in length and width in order to access a building component.
- v. Equipment Room or Area: An area adjacent to the regulated area used for the decontamination of employees and their equipment.
- w. Employee Exposure: That exposure to airborne asbestos that would occur if the employee were not using respiratory protective equipment.
- x. Fiber: A fibrous particulate, 5 micrometers or longer, with a length to width ratio of at least 3 to 1.
- y. Friable ACM: A term defined in 40 CFR 61, Subpart M and EPA 340/1-90-018 meaning any material which contains more than 1 percent asbestos, as determined using the method specified in 40 CFR 763, Subpart E, Appendix A, Section 1, Polarized Light Microscopy (PLM), that when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. If the asbestos content is less than 10 percent, as determined by a method other than point counting by PLM, the asbestos content is verified by point counting using PLM.
- z. Glovebag: Not more than a 60 by 60 inch impervious plastic bag-like enclosure affixed around an asbestos-containing material, with glove-like appendages through which material and tools may be handled.
- aa. High-Efficiency Particulate Air (HEPA) Filter: A filter capable of trapping and retaining at least 99.97 percent of all mono-dispersed particles of 0.3 micrometers in diameter.
- bb. Homogeneous Area: An area of surfacing material or thermal system insulation that is uniform in color and texture.
- cc. Intact: ACM which has not crumbled, been pulverized, or otherwise deteriorated so that the asbestos is no longer likely to be bound with its matrix. Removal of "intact" asphaltic, resinous, cementitious products does not render the ACM non-intact simply by being separated into smaller pieces.

- dd. Model Accreditation Plan (MAP): USEPA training accreditation requirements for persons who work with asbestos as specified in 40 CFR 763, Subpart E, Appendix C.
- ee. Modification: A changed or altered procedure, material or component of a control system, which replaces a procedure, material or component of a required system.
- ff. Negative Exposure Assessment: A demonstration by the Contractor to show that employee exposure during an operation is expected to be consistently below the OSHA Permissible Exposure Limits (PELs).
- gg. NESHAP: National Emission Standards for Hazardous Air Pollutants. The USEPA NESHAP regulation for asbestos is at 40 CFR 61, Subpart M.
- hh. Nonfriable ACM: A NESHAP term defined in 40 CFR 61, Subpart M and EPA 340/1-90-018 meaning any material containing more than 1 percent asbestos, as determined using the method specified in 40 CFR 763, Subpart E, Appendix A, Section 1, Polarized Light Microscopy, that, when dry, cannot be crumbled, pulverized or reduced to powder by hand pressure.
- ii. Nonfriable ACM (Category I): A NESHAP term defined in 40 CFR 61, Subpart E and EPA 340/1-90-018 meaning asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products containing more than 1 percent asbestos as determined using the method specified in 40 CFR 763, Subpart F, Appendix A, Section 1, Polarized Light Microscopy.
- jj. Nonfriable ACM (Category II): A NESHAP term defined in 40 CFR 61, Subpart E and EPA 340/1-90-018 meaning any material, excluding Category I nonfriable ACM, containing more than 1 percent asbestos, as determined using the methods specified in 40 CFR 763, Subpart F, Appendix A, Section 1, Polarized Light Microscopy, that when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.
- kk. Permissible Exposure Limits (PELs):
 - (1) PEL-Time weighted average(TWA): Concentration of asbestos not in excess of 0.1 fibers per cubic centimeter of air (f/cc) as an 8 hour time weighted average (TWA), as determined by the method prescribed in 29 CFR 1926, Section .1101, Appendix A, or the current version of NIOSH Pub No. 84-100 analytical method 7400.
 - (2) PEL-Excursion Limit: An airborne concentration of asbestos not in excess of 1.0 f/cc of air as averaged over a sampling period of 30 minutes as determined by the method prescribed in 29 CFR 1926, Section .1101, Appendix A, or the current version of NIOSH Pub No. 84-100 analytical method 7400.
- ll. Project Designer: A person who has successfully completed the training requirements for an abatement project designer established by EPA Asbestos Model Accreditation Plan: Interim Final Rule(40 CFR Part 763, Appendix C to Subpart E) and whose certification is current.

- mm. Regulated Area: An OSHA term defined in 29 CFR 1926, Section .1101 meaning an area established by the Contractor to demarcate areas where Class I, II, and III asbestos work is conducted; also any adjoining area where debris and waste from such asbestos work accumulate; and an area within which airborne concentrations of asbestos exceed, or there is a reasonable possibility they may exceed, the permissible exposure limit.
- nn. Removal: All operations where ACM is taken out or stripped from structures or substrates, and includes demolition operations.
- oo. Repair: Overhauling, rebuilding, reconstructing, or reconditioning of structures or substrates, including encapsulation or other repair of ACM attached to structures or substrates. If the amount of asbestos so "disturbed" cannot be contained in 1 standard glovebag or waste bag, Class I precautions are required.
- pp. Spills/Emergency Cleanups: Cleanup of sizable amounts of asbestos waste and debris which has occurred, for example, when water damage occurs in a building, and sizable amounts of ACM are dislodged. A Competent Person evaluates the site and ACM to be handled, and based on the type, condition and extent of the dislodged material, classifies the cleanup as Class I, II, or III. Only if the material was intact and the cleanup involves mere contact of ACM, rather than disturbance, could there be a Class IV classification.
- qq. Surfacing ACM: Asbestos-containing material which contains more than 1% asbestos and is sprayed-on, troweled-on, or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, or other purposes.
- rr. Thermal system insulation (TSI) ACM: ACM which contains more than 1% asbestos and is applied to pipes, fittings, boilers, breeching, tanks, ducts, or other interior structural components to prevent heat loss or gain or water condensation.
- ss. Transite: A generic name for asbestos cement wallboard and pipe.
- tt. Worker: Individual (not as the Competent Person or a supervisor) who performs asbestos work and has completed asbestos worker training required by 29 CFR 1926, Section .1101, to include EPA Model Accreditation Plan (MAP) "Worker" training; accreditation required by 40 CFR 763, Subpart E, Appendix C, if required by the OSHA Class of work to be performed or by the state where the work is to be performed.

1.3 DESCRIPTION OF WORK

The work covered by this section includes the removal of asbestos-containing materials (ACM) which are encountered during renovation activities associated with this project and describes procedures and equipment required to protect workers and occupants of the regulated area from contact with airborne asbestos fibers and ACM dust and debris. Activities include OSHA Class I, II, III, and IV work operations involving ACM. The work also includes containment, storage, transportation and disposal of the generated ACM wastes. More specific operational procedures shall be detailed in the required Accident Prevention

Plan and its subcomponents, the Asbestos Hazard Abatement Plan and Activity Hazard Analyses required in paragraph SAFETY AND HEALTH PROGRAM AND PLANS.

1.3.1 Abatement Work Tasks

Abatement tasks are associated with the upgrade of electrical breaker units at federal dam facilities. If not provided with an asbestos survey, the Contractor shall be prepared to survey the work area and perform abatement as required to complete the upgrade.

The Contractor shall survey the work area for the presence of asbestos containing materials. A certified AHERA inspector shall perform the survey and report the condition, location, and quantity of materials. Sampling of suspect asbestos materials shall be performed according to 40 CFR 763.86. The Contractor's project designer shall determine the best management practices for engineering controls and disposal facility. The Contractor's Certified Industrial Hygienist shall determine the health and safety requirements for worker protection, air monitoring (including personal, environmental, and clearance) requirements, and review air monitoring results. The Contractor's Competent Person shall oversee all phases of the abatement project. **A summary of work task data elements for each individual ACM abatement work task shall be listed in Table 1, "Individual Work Task Data Elements" at the end of this section, for review and approval by the Contracting Officer.**

1.3.2 Unexpected Discovery of Asbestos

For any previously untested components suspected to contain asbestos and located in areas impacted by the work, the Contractor shall notify the Contracting Officer (CO) who will have the option of ordering up to 2 bulk samples to be obtained at the Contractor's expense and delivered to a laboratory accredited under the National Institute of Standards and Technology (NIST) "National Voluntary Laboratory Accreditation Program (NVLAP)" and analyzed by PLM at no additional cost to the Government. Any additional components identified as ACM that have been approved by the Contracting Officer for removal shall be removed by the Contractor and will be paid for by an equitable adjustment to the contract price under the CONTRACT CLAUSE titled "changes". Sampling activities undertaken to determine the presence of additional ACM shall be conducted by personnel who have successfully completed the EPA Model Accreditation Plan (MAP) "Building Inspector" training course required by 40 CFR 763, Subpart E, Appendix C.

1.4 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL OF CONTRACT DATA:

SD-04 Drawings

Site Layout; GA.

Descriptions, detail project drawings, and site layout to include worksite containment area techniques, local exhaust ventilation system locations, decontamination and load-out units,

other temporary waste storage facility, access tunnels, location of temporary utilities (electrical, water, sewer) and boundaries of each regulated area.

SD-08 Statements

Qualifications; GA.

A written report providing evidence of qualifications for personnel, facilities and equipment assigned to the work.

Training Program; FIO.

A copy of the written project site-specific training material as indicated in 29 CFR 1926, Section .1101 that will be used to train onsite employees. The training document shall be signed by the Contractor's CIH and Competent Person.

Medical Requirements; FIO.

Physician's written opinion.

Encapsulants; GA.

Certificates stating that encapsulants meet the applicable specified performance requirements.

SD-09 Reports

Exposure Assessment and Air Monitoring; GA.

Initial exposure assessments, negative exposure assessments, air-monitoring results and documentation.

Local Exhaust Ventilation; FIO.

Pressure differential recordings.

Licenses, Permits and Notifications; GA.

Licenses, permits, and notifications.

SD-13 Certificates

Vacuum, Filtration and Ventilation Equipment; FIO.

Manufacturer's certifications showing compliance with ANSI Z9.2 for:

- a. Vacuums.
- b. Water filtration equipment.
- c. Ventilation equipment.

- d. Other equipment required to contain airborne asbestos fibers.

SD-18 Records

Respiratory Protection Program; GA.

Records of the respirator program.

Cleanup and Disposal; GA.

Waste shipment records. Weigh bills and delivery tickets shall be furnished for information only.

1.5 QUALIFICATIONS

1.5.1 Written Qualifications and Organization Report

The Contractor shall furnish a written qualifications and organization report providing evidence of qualifications of the Contractor, Contractor's Project Supervisor, Project Designer, Competent Person, supervisors and workers; Certified CIH (person assigned to project and firm name); independent testing laboratory; all subcontractors to be used including disposal transportation and disposal facility firms, subcontractor supervisors, subcontractor workers; and any others assigned to perform asbestos abatement and support activities. The report shall be signed by the Contractor, the Contractor's onsite project manager, Competent Person, CIH, testing laboratory and the principals of all subcontractors to be used. The Contractor shall include the following statement in the report: "By signing this report I certify that the personnel I am responsible for during the course of this project fully understand the contents of 29 CFR 1926, Section .1101, 40 CFR 61, Subpart M, and the federal, state and local requirements specified in paragraph SAFETY AND HEALTH PROGRAM AND PLANS for those asbestos abatement activities that they will be involved in."

1.5.2 Specific Requirements

The Contractor shall designate in writing, personnel meeting the following qualifications:

- a. Competent Person: The name, address, telephone number, and resume of the Contractor's Competent Person shall be provided. Evidence that the full-time Competent Person is qualified in accordance with 29 CFR 1926, Sections .32 and .1101, has EPA Model Accreditation Plan (MAP) "Contractor/Supervisor" training accreditation required by 40 CFR 763, Subpart E, Appendix C, and is experienced in the administration and supervision of asbestos abatement projects, including exposure assessment and monitoring, work practices, abatement methods, protective measures for personnel, setting up and inspecting asbestos abatement work areas, evaluating the integrity of containment barriers, placement and operation of local exhaust systems, ACM generated waste containment and disposal procedures, decontamination units installation and maintenance requirements, site safety and health requirements, notification of other employees onsite, etc. The duties of the Competent Person shall include the following: controlling entry to and exit from the regulated area; supervising any employee exposure monitoring required by 29 CFR 1926, Section .1101; ensuring that all employees working within a

regulated area wear the appropriate personal protective equipment (PPE), are trained in the use of appropriate methods of exposure control, and use the hygiene facilities and decontamination procedures specified; and ensuring that engineering controls in use are in proper operating conditions and are functioning properly. The Competent Person shall be responsible for compliance with applicable federal, state and local requirements, the Contractor's Accident Prevention Plan and Asbestos Hazard Abatement Plan. The Competent Person shall provide, and the Contractor shall submit, the "Contractor/Supervisor" course completion certificate and the most recent certificate for required refresher training with the employee "Certificate of Worker Acknowledgment" required by this paragraph. The Contractor shall submit evidence that this person has a minimum of 2 years of on-the-job asbestos abatement experience relevant to OSHA competent person requirements. The Competent Person shall be onsite at all times during the conduct of this project.

- b. **Project and Other Supervisors:** The Contractor shall provide the name, address, telephone number, and resume of the Project Supervisor and other supervisors who have responsibility to implement the Accident Prevention Plan, including the Asbestos Hazard Abatement Plan and Activity Hazard Analyses, the authority to direct work performed under this contract and verify compliance, and have EPA Model Accreditation Plan (MAP) "Contractor/Supervisor" training accreditation required by 40 CFR 763, Subpart E, Appendix C. The Project Supervisor and other supervisors shall provide, and the Contractor shall submit, the "Contractor/Supervisor" course completion certificate and the most recent certificate for required refresher training with the employee "Certificate of Worker Acknowledgment" required by this paragraph. The Contractor shall submit evidence that the Project Supervisor has a minimum of 2 years of on-the-job asbestos abatement experience.
- c. **Certified Industrial Hygienist:** The Contractor shall provide the name, address, telephone number, resume and other information specified below for the Certified Industrial Hygienist (CIH) selected to prepare the Contractor's Asbestos Hazard Abatement Plan, prepare and perform training, direct air monitoring and assist the Contractor's Competent Person in implementing and ensuring that safety and health requirements are complied with during the performance of all required work. The CIH shall be a person who is board certified in the practice of industrial hygiene as determined and documented by the American Board of Industrial Hygiene (ABCIH), has EPA Model Accreditation Plan (MAP) "Contractor/Supervisor" training accreditation required by 40 CFR 763, Subpart E, Appendix C, and has a minimum of 2 years of comprehensive experience in planning and overseeing asbestos abatement activities.
- d. **Asbestos Abatement Workers:** Asbestos abatement workers shall meet the requirements contained in 29 CFR 1926, Section .1101, 40 CFR 61, Subpart M, and other applicable federal, state and local requirements. Worker training documentation shall be provided as required on the "Certificate of Workers Acknowledgment" in this paragraph.
- e. **Worker Training and Certification of Worker Acknowledgment:** Training documentation will be required for each employee who will perform OSHA Class I, Class II, Class III, or Class IV asbestos abatement operations. Such documentation shall be submitted on a Contractor generated form titled "Certificate of Workers

Acknowledgment", to be completed for each employee in the same format and containing the same information as the example certificate at the end of this section. Training course completion certificates (initial and most recent update refresher) required by the information checked on the form shall be attached.

- f. Project designer. The Contractor shall provide the name of the Project Designer and evidence that this person is qualified in accordance with 29 CFR 1926, Sections .32 and .1101, has EPA Model Accreditation Plan (MAP) "Project Designer" training accreditation required by 40 CFR 763, Subpart E, Appendix C. The Project Designer shall be responsible for compliance with applicable federal, state and local requirements, the Contractor's Accident Prevention Plan and Asbestos Hazard Abatement Plan. The project designer shall have a minimum of two years abatement design experience within the last four years. A copy of the EPA project designer certificate and most recent refresher course completion shall be included with the abatement plan.
- g. First Aid and CPR Trained Persons: The names of at least 2 persons who are currently trained in first aid and CPR by the American Red Cross or other approved agency shall be and shall be onsite at all times during site operations. They shall be trained in universal precautions and the use of PPE as described in the Bloodborne Pathogens Standard of 29 CFR 1910, Section .1030 and shall be included in the Contractor's Bloodborne Pathogen Program. These persons may perform other duties but shall be immediately available to render first aid when needed.
- h. Independent Testing Laboratory: The Contractor shall provide the name, address and telephone number of the independent testing laboratory selected to perform the sample analyses and report the results. The testing laboratory shall be completely independent from the Contractor as recognized by federal, state or local regulations. Written verification of the following criteria, signed by the testing laboratory principal and the Contractor, shall be submitted:
 - (1) Phase contrast microscopy (PCM): The laboratory is fully equipped and proficient in conducting PCM of airborne samples using the methods specified by 29 CFR 1926, Section .1101, OSHA method ID-160, the most current version of NIOSH Pub No. 84-100 Method 7400.
 - (2) Polarized light microscopy (PLM): The laboratory is fully equipped and proficient in conducting PLM analyses of suspect ACM bulk samples in accordance with 40 CFR 763, Subpart E, Appendix E; the laboratory is currently accredited by NIST under the NVLAP for bulk asbestos analysis.
- i. Disposal Facility, Transporter: The Contractor shall provide written evidence that the landfill to be used is approved for asbestos disposal by federal, state, and local regulatory agencies. Copies of signed agreements between the Contractor (including subcontractors and transporters) and the asbestos waste disposal facility to accept and dispose of all asbestos containing waste generated during the performance of this contract shall be provided. Qualifications shall be provided for each subcontractor or transporter to be used, indicating previous experience in transport and disposal of asbestos waste to include all required state and local waste hauler requirements for asbestos. The Contractor and transporters shall meet the DOT requirements of 49 CFR 171, 49 CFR 172, and 49 CFR 173 as well as

registration requirements of 49 CFR 107 and other applicable state or local requirements. The disposal facility shall meet the requirements of 40 CFR 61, Sections .154 or .155, as required in 40 CFR 61, Section .150(b), and other applicable state or local requirements.

1.5.3 Federal, State or Local Citations on Previous Projects

The Contractor and all subcontractors shall submit a statement, signed by an officer of the company, containing a record of any citations issued by Federal, State or local regulatory agencies relating to asbestos activities (including projects, dates, and resolutions); a list of penalties incurred through non-compliance with asbestos project specifications, including liquidated damages, overruns in scheduled time limitations and resolutions; and situations in which an asbestos-related contract has been terminated (including projects, dates, and reasons for terminations). If there are none, a negative declaration signed by an officer of the company shall be provided.

1.6 REGULATORY REQUIREMENTS

In addition to detailed requirements of this specification, work performed under this contract shall comply with EM 385-1-1, **applicable federal, state, and local laws, ordinances, criteria, rules and regulations regarding handling, storing, transporting, and disposing of asbestos waste materials. This includes, but is not limited to, OSHA standards, 29 CFR 1926**, especially Section .1101, 40 CFR 61, Subpart M and 40 CFR 763. Matters of interpretation of standards shall be submitted to the appropriate administrative agency for resolution before starting work. Where the requirements of this specification, applicable laws, criteria, ordinances, regulations, and referenced documents vary, the most stringent requirements shall apply.

1.7 SAFETY AND HEALTH PROGRAM AND PLANS

The Contractor shall develop and submit a written comprehensive site-specific Accident Prevention Plan at least 21 days prior to the preconstruction conference. The Accident Prevention Plan shall address requirements of EM 385-1-1, Appendix A, covering onsite work to be performed by the Contractor and subcontractors. The Accident Prevention Plan shall incorporate an Asbestos Hazard Abatement Plan, and Activity Hazard Analyses as separate appendices into 1 site specific Accident Prevention Plan document. Any portions of the Contractor's overall Safety and Health Program that are referenced in the Accident Prevention Plan, e.g., respirator program, hazard communication program, confined space entry program, etc., shall be included as appendices to the Accident Prevention Plan. The plan shall take into consideration all the individual asbestos abatement work tasks identified in Table 1. The plan shall be prepared, signed (and sealed, including certification number if required), and dated by the Contractor's CIH, Project Designer, Competent Person, and Project Supervisor.

1.7.1 Asbestos Hazard Abatement Plan Appendix

The Asbestos Hazard Abatement Plan appendix to the Accident Prevention Plan shall include, but not be limited to, the following:

- a. The personal protective equipment to be used;

- b. The location and description of regulated areas including clean and dirty areas, access tunnels, and decontamination unit (clean room, shower room, equipment room, storage areas such as load-out unit);
- c. Initial exposure assessment in accordance with 29 CFR 1926, Section .1101;
- d. Level of supervision;
- e. Method of notification of other employers at the worksite;
- f. Abatement method to include containment and control procedures;
- g. Interface of trades involved in the construction;
- h. Sequencing of asbestos related work;
- i. Storage and disposal procedures and plan;
- j. Type of wetting agent and asbestos encapsulant to be used;
- k. Location of local exhaust equipment;
- l. Air monitoring methods (personal, environmental and clearance);
- m. Bulk sampling and analytical methods (if required);
- n. A detailed description of the method to be employed in order to control the spread of ACM wastes and airborne fiber concentrations;
- o. Fire and medical emergency response procedures;
- p. The security procedures to be used for all regulated areas.

1.7.2 Activity Hazard Analyses Appendix

Activity Hazard Analyses, for each major phase of work, shall be submitted and updated during the project. The Activity Hazard Analyses format shall be in accordance with EM 385-1-1 (Figure 1-1). The analysis shall define the activities to be performed for a major phase of work, identify the sequence of work, the specific hazards anticipated, and the control measures to be implemented to eliminate or reduce each hazard to an acceptable level. Work shall not proceed on that phase until the Activity Hazard Analyses has been accepted and a preparatory meeting has been conducted by the Contractor to discuss its contents with everyone engaged in the activities, including the onsite Government representatives. The Activity Hazard Analyses shall be continuously reviewed and, when appropriate, modified to address changing site conditions or operations.

1.8 PRECONSTRUCTION CONFERENCE AND ONSITE SAFETY

The Contractor and the Contractor's Competent Person, Project Supervisor, Project Designer, and CIH shall meet with the Contracting Officer prior to beginning work at a safety preconstruction conference to discuss the details of the Contractor's submitted Accident

Prevention Plan to include the Asbestos Hazard Abatement Plan and Activity Hazard Analyses appendices. Deficiencies in the Accident Prevention Plan will be discussed and the Accident Prevention Plan shall be revised to correct the deficiencies and resubmitted for acceptance. Any changes required in the specification as a result of the Accident Prevention Plan shall be identified specifically in the plan to allow for free discussion and acceptance by the Contracting Officer, prior to the start of work. Onsite work shall not begin until the Accident Prevention Plan has been accepted. A copy of the written Accident Prevention Plan shall be maintained onsite. Changes and modifications to the accepted Accident Prevention Plan shall be made with the knowledge and concurrence of the CIH, the Project Supervisor, Competent Person, and the Contracting Officer. Should any unforeseen hazard become evident during the performance of the work, the CIH shall bring such hazard to the attention of the Project Supervisor, Competent Person, and the Contracting Officer, both verbally and in writing, for resolution as soon as possible. In the interim, all necessary action shall be taken by the Contractor to restore and maintain safe working conditions in order to safeguard onsite personnel, visitors, the public, and the environment. Once accepted by the Contracting Officer, the Accident Prevention Plan, including the Asbestos Hazard Abatement Plan and Activity Hazard Analyses will be enforced as if an addition to the contract. Disregarding the provisions of this contract or the accepted Accident Prevention Plan will be cause for stopping of work, at the discretion of the Contracting Officer, until the matter has been rectified.

1.9 SECURITY

A log book shall be kept documenting entry into and out of the regulated area. Entry into regulated areas shall only be by personnel authorized by the Contractor and the Contracting Officer. Personnel authorized to enter regulated areas shall be trained, be medically evaluated, and wear the required personal protective equipment, for the specific regulated area to be entered.

1.10 MEDICAL REQUIREMENTS

Medical requirements shall conform to 29 CFR 1926, Section .1101.

1.10.1 Medical Examinations

Before being exposed to airborne asbestos fibers, workers shall be provided with a medical examination as required by 29 CFR 1926, Section .1101 and other pertinent state or local requirements. This requirement shall have been satisfied within the last 12 months.

1.10.2 Medical and Exposure Records

Complete and accurate records shall be maintained of each employee's medical examinations, medical records, and exposure data, as required by 29 CFR 1910, Section .1910.20 and 29 CFR 1926, Section .1101.

1.11 TRAINING PROGRAM

1.11.1 Project Specific Training

Prior to commencement of work, each worker shall be instructed by the Contractor's CIH and Competent Person in the following project specific training:

- a. The hazards and health effects of the specific types of ACM to be abated;
- b. The content and requirements of the Contractor's Accident Prevention Plan to include the Asbestos Hazard Abatement Plan and Activity Hazard Analyses and site-specific safety and health precautions;
- c. Hazard Communication Program;
- d. Hands-on training for each asbestos abatement technique to be employed;
- e. Heat and/or cold stress monitoring specific to this project;
- f. Air monitoring program and procedures;
- g. Medical surveillance to include medical and exposure record-keeping procedures;
- h. The association of cigarette smoke and asbestos-related disease;
- i. Security procedures;
- j. Specific work practice controls and engineering controls required for each Class of work in accordance with 29 CFR 1926, Section .1101.

1.12 RESPIRATORY PROTECTION PROGRAM

The Contractor's CIH shall establish in writing, and implement a respiratory protection program in accordance with 29 CFR 1926, Section .1101, 29 CFR 1910, Section .134, ANSI Z88.2, CGA G-7, CGA G-7.1. The Contractor's CIH shall establish minimum respiratory protection requirements based on measured or anticipated levels of airborne asbestos fiber concentrations encountered during the performance of the asbestos abatement work.

1.12.1 Respiratory Fit Testing

A qualitative or quantitative fit test conforming to 29 CFR 1926, Section 1101, Appendix C shall be conducted by the Contractor's CIH for each Contractor worker required to wear a respirator. A respirator fit test shall be performed for each worker wearing a negative-pressure respirator prior to initially wearing a respirator on this project and every 6 months thereafter.

1.12.2 Respirator Selection and Use Requirements

The Contractor shall provide respirators, and ensure that they are used as required by 29 CFR 1926, Section .1101 and in accordance with the manufacturer's recommendations. Respirators shall be jointly approved by the Mine Safety and Health Administration and the National Institute for Occupational Safety and Health (MSHA/NIOSH), or by NIOSH, under the provisions of 42 CFR 84, for use in environments containing airborne asbestos fibers. For air-purifying respirators, the particulate filter portion of the cartridges or canister approved for use in airborne asbestos environments shall be high-efficiency particulate air (HEPA). The initial respirator selection and the decisions regarding the upgrading or downgrading of respirator type shall be made by the Contractor's CIH based on the measured or anticipated airborne asbestos fiber concentrations to be encountered. Recommendations made by the

Contractor's CIH to downgrade respirator type shall be submitted in writing to the Contracting Officer. The Contractor's Competent Person in consultation with the CIH, shall have the authority to take immediate action to upgrade or downgrade respiratory type when there is an immediate danger to the health and safety of the wearer. Respirators shall be used in the following circumstances:

- a. During all Class I asbestos jobs.
- b. During all Class II work where the ACM is not removed in a substantially intact state.
- c. During all Class II and III work which is not performed using wet methods.
Respirators need not be worn during removal of ACM from sloped roofs when a negative exposure assessment has been made and ACM is removed in an intact state.
- d. During all Class II and III asbestos jobs where the Contractor does not produce a negative exposure assessment.
- e. During all Class III jobs where TSI or surfacing ACM is being disturbed.
- f. During all Class IV work performed within regulated areas where employees performing other work are required to wear respirators.
- g. During all work where employees are exposed above the PEL-TWA or PEL-Excursion Limit.
- h. In emergencies

1.12.3 Class I Work

The Contractor shall provide: (1) a tight-fitting, powered air purifying respirator equipped with high efficiency filters, or (2) a full-facepiece supplied air respirator operated in the pressure demand mode, equipped with HEPA egress cartridges, or (3) an auxiliary positive pressure self-contained breathing apparatus, for all employees within the regulated area where Class I work is being performed; provided that a negative exposure assessment has not been produced, and that the exposure level will not exceed 1 f/cc as an 8-hour time weighted average. A full-facepiece supplied air respirator, operated in the pressure demand mode, equipped with an auxiliary positive pressure self-contained breathing apparatus shall be provided under such conditions, if the exposure assessment indicates exposure levels above 1 f/cc as an 8-hour time weighted average.

1.12.4 Class II and III Work

The Contractor shall provide an air purifying respirator, other than a disposable respirator, equipped with high-efficiency filters whenever the employee performs Class II and III asbestos jobs where the Contractor does not produce a negative exposure assessment; and Class III jobs where TSI or surfacing ACM is being disturbed.

1.12.5 Sanitation

Employees who wear respirators shall be permitted to leave work areas to wash their faces and respirator facepieces whenever necessary to prevent skin irritation associated with respirator use.

1.13 HAZARD COMMUNICATION PROGRAM

A hazard communication program shall be established and implemented in accordance with 29 CFR 1926, Section .59. Material safety data sheets (MSDSs) shall be provided for all hazardous materials brought onto the worksite. One copy shall be provided to the Contracting Officer and 1 copy shall be included in the Contractor's Hazard Communication Program.

1.14 LICENSES, PERMITS AND NOTIFICATIONS

1.14.1 General Legal Requirements

Necessary licenses, permits and notifications shall be obtained in conjunction with the project's asbestos abatement, transportation and disposal actions and timely notification furnished of such actions as required by federal, state, regional, and local authorities. The Contractor shall notify the Regional Office of the USEPA, state's environmental protection agency responsible for asbestos air emissions, or local air pollution control district/agency, and the Contracting Officer in writing, at least 10 days prior to the commencement of work, in accordance with 40 CFR 61, Subpart M, and state and local requirements to include the mandatory "Notification of Demolition and Renovation Record" form and other required notification documents. Notification shall be by Certified Mail, Return Receipt Requested. The Contractor shall furnish copies of the receipts to the Contracting Officer, in writing, prior to the commencement of work. A copy of the rental company's written acknowledgment and agreement shall be provided as required by paragraph RENTAL EQUIPMENT. For licenses, permits, and notifications that the Contractor is responsible for obtaining, the Contractor shall pay any associated fees or other costs incurred.

1.14.2 Litigation and Notification

The Contractor shall notify the Contracting Officer if any of the following occur:

- a. The Contractor or any of the subcontractors are served with notice of violation of any law, regulation, permit or license which relates to this contract;
- b. Proceedings are commenced which could lead to revocation of related permits or licenses; permits, licenses or other Government authorizations relating to this contract are revoked;
- c. Litigation is commenced which would affect this contract;
- d. The Contractor or any of the subcontractors become aware that their equipment or facilities are not in compliance or may fail to comply in the future with applicable laws or regulations.

1.15 PERSONAL PROTECTIVE EQUIPMENT

Contracting Officer and authorized visitors shall be provided with training equivalent to that provided to Contractor employees in the selection, fitting, and use of the required personal protective equipment and the site safety and health requirements. Contractor workers shall be provided with personal protective clothing and equipment and the Contractor shall ensure that it is worn properly. The Contractor's CIH and Competent Person shall select and approve all the required personal protective clothing and equipment to be used.

1.15.1 Respirators

Respirators shall be in accordance with paragraph RESPIRATORY PROTECTION PROGRAM.

1.15.2 Whole Body Protection

Personnel exposed to airborne concentrations of asbestos that exceed the PELs, or for all OSHA Classes of work for which a required negative exposure assessment is not produced, shall be provided with whole body protection and such protection shall be worn properly.

1.15.2.3 Work Clothing

An additional coverall shall be provided when the abatement and control method employed does not provide for the exit from the regulated area directly into an attached decontamination unit. Cloth work clothes for wear under the protective coverall, and foot coverings, shall be provided when work is being conducted in low temperature conditions. Cloth work clothes shall be either disposed of as asbestos contaminated waste or properly laundered in accordance with 29 CFR 1926, Section .1101.

1.15.2.4 Gloves

Gloves shall be provided to protect the hands. Where there is the potential for hand injuries (i.e., scrapes, punctures, cuts, etc.) a suitable glove shall be provided and used.

1.15.2.5 Foot Coverings

Cloth socks shall be provided and worn next to the skin. Footwear, as required by OSHA and EM 385-1-1, that is appropriate for safety and health hazards in the area shall be worn. Rubber boots shall be used in moist or wet areas. Reusable footwear removed from the regulated area shall be thoroughly decontaminated or disposed of as ACM waste. Disposable protective foot covering shall be disposed of as ACM waste. If rubber boots are not used, disposable foot covering shall be provided.

1.15.2.6 Head Covering

Hood type head covering shall be provided. In addition, protective head gear (hard hats) shall be provided as required. Hard hats shall only be removed from the regulated area after being thoroughly decontaminated.

1.15.2.7 Protective Eye Wear

Eye protection provided shall be in accordance with ANSI Z87.1.

1.16 HYGIENE FACILITIES AND PRACTICES

The Contractor shall establish a decontamination area for the decontamination of employees, material and equipment. The Contractor shall ensure that employees enter and exit the regulated area through the decontamination area.

1.16.1 Shower Facilities

Shower facilities, when provided, shall comply with 29 CFR 1910, Section .141(d)(3).

1.16.2 3-Stage Decontamination Area

A temporary negative pressure decontamination unit that is adjacent and attached in a leak-tight manner to the regulated area shall be provided, if required. The decontamination unit shall have an equipment room and a clean room separated by a shower that complies with 29 CFR 1910, Section .141 (unless the Contractor can demonstrate that such facilities are not feasible).

1.16.3 Load-Out Unit

A temporary load-out unit that is adjacent and connected to the regulated area shall be provided. Utilization of prefabricated units shall have prior approval of the Contracting Officer. The load-out unit shall be attached in a leak-tight manner to each regulated area. Surfaces of the load-out unit and access tunnel shall be adequately wet-wiped 2 times after each shift change. Materials used for wet wiping shall be disposed of as asbestos contaminated waste.

1.16.4 Single Stage Decontamination Area

A decontamination area (equipment room/area) shall be provided for Class I work involving less than 25 feet or 10 square feet of TSI or surfacing ACM, and for Class II and Class III asbestos work operations where exposures exceed the PELs or where there is no negative exposure assessment produced before the operation. The equipment room or area shall be adjacent to the regulated area for the decontamination of employees, material, and their equipment which is contaminated with asbestos. The equipment room or area shall consist of an area covered by an impermeable drop cloth on the floor or horizontal working surface. The area must be of sufficient size to accommodate cleaning of equipment and removing personal protective equipment without spreading contamination beyond the area. Surfaces of the equipment room shall be wet wiped 2 times after each shift. Materials used for wet wiping shall be disposed of as asbestos contaminated waste.

1.16.5 Decontamination Requirements for Class IV Work

The Contractor shall ensure that employees performing Class IV work within a regulated area comply with the hygiene practice required of employees performing work which has a higher classification within that regulated area, or the Contractor shall provide alternate decontamination area facilities for employees cleaning up debris and material which is TSI or surfacing ACM.

1.16.6 Decontamination Area Entry Procedures

The Contractor shall ensure that employees entering the decontamination area through the clean room or clean area:

- a. Remove street clothing in the clean room or clean area and deposit it in lockers.
- b. Put on protective clothing and respiratory protection before leaving the clean room or clean area.
- c. Pass through the equipment room to enter the regulated area.

1.16.7 Decontamination Area Exit Procedures

The Contractor shall ensure that the following procedures are followed:

- a. Before leaving the regulated area, respirators shall be worn while employees remove all gross contamination and debris from their work clothing using a HEPA vacuum.
- b. Employees shall remove their protective clothing in the equipment room and deposit the clothing in labeled impermeable bags or containers for disposal and/or laundering.
- c. Employees shall not remove their respirators in the equipment room.
- d. Employees shall shower prior to entering the clean room. If a shower has not been located between the equipment room and the clean room or the work is performed outdoors, the Contractor shall ensure that employees engaged in Class I asbestos jobs: a) Remove asbestos contamination from their work suits in the equipment room or decontamination area using a HEPA vacuum before proceeding to a shower that is not adjacent to the work area; or b) Remove their contaminated work suits in the equipment room, without cleaning worksuits, and proceed to a shower that is not adjacent to the work area.
- e. After showering, employees shall enter the clean room before changing into street clothes.

1.16.8 Lunch Areas

The Contractor shall provide lunch areas in which the airborne concentrations of asbestos are below 0.01 f/cc.

1.16.9 Smoking

Smoking, if allowed by the Contractor, shall only be permitted in areas approved by the Contracting Officer.

1.17 REGULATED AREAS

All Class I, II, and III asbestos work shall be conducted within regulated areas. The regulated area shall be demarcated to minimize the number of persons within the area and to protect persons outside the area from exposure to airborne asbestos. Where critical barriers or negative pressure enclosures are used, they shall demarcate the regulated area. Access to regulated areas shall be limited to authorized persons. The Contractor shall control access to regulated areas, ensure that only authorized personnel enter, and verify that Contractor required medical surveillance, training and respiratory protection program requirements are met prior to allowing entrance.

1.18 WARNING SIGNS AND TAPE

Warning signs and tape printed in English shall be provided at the regulated boundaries and entrances to regulated areas. The Contractor shall ensure that all personnel working in areas contiguous to regulated areas comprehend the warning signs. Signs shall be located to allow personnel to read the signs and take the necessary protective steps required before entering the area. Warning signs, shall be in vertical format conforming to 29 CFR 1910 and 29 CFR 1926, Section .1101, a minimum of 20 by 14 inches, and displaying the following legend in the lower panel:

DANGER
ASBESTOS
CANCER AND LUNG DISEASE HAZARD
AUTHORIZED PERSONNEL ONLY

Spacing between lines shall be at least equal to the height of the upper of any two lines..

1.19 WARNING LABELS

Warning labels shall be affixed to all asbestos disposal containers used to contain asbestos materials, scrap, waste debris, and other products contaminated with asbestos. Containers with preprinted warning labels conforming to requirements are acceptable. Warning labels shall conform to 29 CFR 1926, Section .1101 and shall be of sufficient size to be clearly legible displaying the following legend:

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD

1.20 LOCAL EXHAUST VENTILATION

Local exhaust ventilation units shall conform to ANSI Z9.2 and 29 CFR 1926, Section .1101. Filters on local exhaust system equipment shall conform to ANSI Z9.2 and UL 586. Filter shall be UL labeled.

1.21 TOOLS

Vacuums shall be leak proof to the filter, equipped with HEPA filters, of sufficient capacity and necessary capture velocity at the nozzle or nozzle attachment to efficiently collect, transport

and retain the ACM waste material. Power tools shall not be used to remove ACM unless the tool is equipped with effective, integral HEPA filtered exhaust ventilation capture and collection system, or has otherwise been approved for use by the Contracting Officer. Residual asbestos shall be removed from reusable tools prior to storage and reuse. Reusable tools shall be thoroughly decontaminated prior to being removed from regulated areas.

1.22 RENTAL EQUIPMENT

If rental equipment is to be used, written notification shall be provided to the rental agency, concerning the intended use of the equipment, the possibility of asbestos contamination of the equipment and the steps that will be taken to decontaminate such equipment. A written acceptance of the terms of the Contractor's notification shall be obtained from the rental agency.

1.23 AIR MONITORING EQUIPMENT

The Contractor's CIH shall approve air monitoring equipment to be used to collect samples.

1.24 EXPENDABLE SUPPLIES

1.24.1 Glovebag

Glovebags shall be provided as described in 29 CFR 1926, Section .1101. The glovebag assembly shall be 6 mil thick plastic, prefabricated and seamless at the bottom with preprinted OSHA warning label.

1.24.2 Duct Tape

Industrial grade duct tape of appropriate widths suitable for bonding sheet plastic and disposal container shall be provided.

1.24.3 Disposal Containers

Leak-tight (defined as solids, liquids, or dust that cannot escape or spill out) disposal containers shall be provided for ACM wastes as required by 29 CFR 1926 Section .1101.

1.24.4 Disposal Bags

Leak-tight bags, 6 mil thick, shall be provided for placement of asbestos generated waste.

1.24.5 Fiberboard Drums

Fiberboard drums shall be provided for placement of asbestos generated waste.

1.24.6 Cardboard Boxes

Heavy-duty corrugated cardboard boxes, coated with plastic or wax to retard deterioration from moisture, if required by state or local requirements. Filled boxes shall be sealed leak-tight with duct tape.

1.24.7 Sheet Plastic

Sheet plastic shall be polyethylene of 6 mil minimum thickness and shall be provided in the largest sheet size necessary to minimize seams, as indicated on the project drawings.

1.24.7.1 Flame Resistant

Where a potential for fire exists, flame-resistant sheets shall be provided. Film shall conform to the requirements of NFPA 701.

1.24.7.2 Reinforced

Reinforced sheets shall be provided where high skin strength is required, such as where it constitutes the only barrier between the regulated area and the outdoor environment. The sheet stock shall consist of translucent, nylon-reinforced or woven-polyethylene thread laminated between 2 layers of polyethylene film. Film shall meet flame resistant standards of NFPA 701.

1.24.8 Amended Water

Amended water shall meet the requirements of ASTM D 1331.

1.24.9 Mastic Removing Solvent

Mastic removing solvent shall be nonflammable and shall not contain methylene chloride, glycol ether, or halogenated hydrocarbons. Solvents used onsite shall have a flash point greater than 140 degrees F.

1.24.11 Viewing Inspection Window

Where feasible, a minimum of 1 clear, 1/8 inch thick, acrylic sheet, 18 by 24 inches, shall be installed as a viewing inspection window at eye level on a wall in each containment enclosure. The windows shall be sealed leak-tight with industrial grade duct tape.

1.24.12 Wetting Agents

Removal encapsulant (a penetrating encapsulant) shall be provided when conducting removal abatement activities that require a longer removal time or are subject to rapid evaporation of amended water. Performance requirements for penetrating encapsulants are specified in paragraph ENCAPSULANTS.

1.25 MISCELLANEOUS ITEMS

A sufficient quantity of other items, such as, but not limited to: scrapers, brushes, brooms, staple guns, tarpaulins, shovels, rubber squeegees, dust pans, other tools, scaffolding, staging, enclosed chutes, wooden ladders, lumber necessary for the construction of containments, UL approved temporary electrical equipment, material and cords, ground fault circuit interrupters, water hoses of sufficient length, fire extinguishers, first aid kits, portable toilets, logbooks, log forms, markers with indelible ink, spray paint in bright color to mark areas, project boundary fencing, etc., shall be provided.

PART 2 PRODUCTS

2.1 ENCAPSULANTS

Encapsulants shall conform to USEPA requirements, shall contain no toxic or hazardous substances and no solvent and shall meet the following requirements:

ALL ENCAPSULANTS

<u>Requirement</u>	<u>Test Standard</u>
Flame Spread - 25, Smoke Emission - 50	ASTM E 84
Combustion Toxicity Zero Mortality	Univ. of Pittsburgh Protocol
Life Expectancy, 20 yrs Accelerated Aging Test	ASTM C 732
Permeability, Minimum 0.4 perms	ASTM E 96

Additional Requirements for Penetrating Encapsulant

<u>Requirement</u>	<u>Test Standard</u>
Cohesion/Adhesion Test, 50 pounds of force/foot	ASTM E 736
Fire Resistance, Negligible affect on fire resistance rating over 3 hour test(Classified by UL for use over fibrous and cementitious sprayed fireproofing)	ASTM E 119
Impact Resistance, Minimum 43 in-lb (Gardner Impact Test)	ASTM D 2794
Flexibility, no rupture or cracking (Mandrel Bend Test)	ASTM D 522

Additional Requirements for Lockdown Encapsulant

<u>Requirement</u>	<u>Test Standard</u>
Fire Resistance, Negligible affect on fire resistance rating over 3 hour test(Tested with fireproofing over encapsulant applied directly to steel member)	ASTM E 119
Bond Strength, 100 pounds of force/foot (Tests compatibility with cementitious and fibrous fireproofing)	ASTM E 736

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

Asbestos abatement work tasks shall be performed as detailed in the Contractor's Accident Prevention Plan, Asbestos Hazard Abatement Plan, and the Activity Hazard Analyses. The Contractor shall use the engineering controls and work practices required in 29 CFR 1926, Section .1101(g) in all operations regardless of the levels of exposure. Personnel shall wear and utilize protective clothing and equipment as specified. The Contractor shall not permit eating, smoking, drinking, chewing or applying cosmetics in the regulated area. All hot work (burning, cutting, welding, etc.) shall be conducted under controlled conditions in conformance with 29 CFR 1926, Section .352, Fire Prevention. Personnel of other trades, not engaged in asbestos abatement activities, shall not be exposed at any time to airborne concentrations of asbestos unless all the administrative and personal protective provisions of the Contractor's Accident Prevention Plan are complied with. Power to the regulated area shall be locked-out and tagged in accordance with 29 CFR 1910. Lock-out of electrical equipment shall be coordinated through the Contracting Officer. Temporary electrical service with ground fault circuit interrupters shall be provided as needed. Temporary electrical service shall be disconnected when necessary for wet removal. The Contractor shall stop abatement work in the regulated area immediately when the airborne total fiber concentration: (1) equals or exceeds 0.01 f/cc, or the pre-abatement concentration, whichever is greater, outside the regulated area; or (2) equals or exceeds 1.0 f/cc inside the regulated area. The Contractor shall correct the condition to the satisfaction of the Contracting Officer, including visual inspection and air sampling. Work shall resume only upon notification by the Contracting Officer. Corrective actions shall be documented.

3.2 PROTECTION OF ADJACENT WORK OR AREAS TO REMAIN

Asbestos abatement shall be performed without damage to or contamination of adjacent work or area. Where such work or area is damaged or contaminated, as verified by the Contracting Officer using visual inspection or sample analysis, it shall be restored to its original condition or decontaminated by the Contractor at no expense to the Government, as deemed appropriate by the Contracting Officer. This includes inadvertent spill of dirt, dust or debris in which it is reasonable to conclude that asbestos may exist. When these spills occur, work shall stop in all effected areas immediately and the spill shall be cleaned. When satisfactory visual inspection and air sampling analysis results are obtained and have been evaluated by the Contractor's CIH and the Contracting Officer, work shall proceed.

3.3 OBJECTS

3.3.1 Removal of Mobile Objects

Mobile objects, furniture, and equipment will be removed from the area of work by the Government before asbestos abatement work begins.

3.3.2 Stationary Objects

Stationary objects, furniture, and equipment shall remain in place and shall be precleaned using HEPA vacuum. Stationary objects and furnishings shall be covered with 2 layers of polyethylene and edges sealed with duct tape.

3.4 BUILDING VENTILATION SYSTEM AND CRITICAL BARRIERS

Building ventilating systems supplying air into or returning air out of a regulated area shall be isolated by airtight seals to prevent the spread of contamination throughout the system. Airtight critical barriers shall be installed on building ventilating openings located inside the regulated area that supply or return air from the building ventilation system or serve to exhaust air from the building. The critical barriers shall consist of air-tight rigid covers for building ventilation supply and exhaust grills where the ventilation system is required to remain in service during abatement] [2 layers of polyethylene. Edges to wall, ceiling and floor surfaces shall be sealed with industrial grade duct tape.

3.6 METHODS OF COMPLIANCE

3.6.1 Mandated Practices

The Contractor shall employ proper handling procedures in accordance with 29 CFR 1926 and 40 CFR 61, Subpart M, and the specified requirements. The specific abatement techniques and items identified shall be detailed in the Contractor's Asbestos Hazard Abatement Plan including, but not limited to, details of construction materials, equipment, and handling procedures. The Contractor shall use the following engineering controls and work practices in all operations, regardless of the levels of exposure:

- a. Vacuum cleaners equipped with HEPA filters to collect debris and dust containing ACM.
- b. Wet methods or wetting agents to control employee exposures during asbestos handling, mixing, removal, cutting, application, and cleanup; except where it can be demonstrated that the use of wet methods is unfeasible due to, for example, the creation of electrical hazards, equipment malfunction, and in roofing.
- c. Prompt clean-up and disposal in leak-tight containers of wastes and debris contaminated with asbestos.
- d. Inspection and repair of polyethylene in work and high traffic areas.
- e. Cleaning of equipment and surfaces of containers filled with ACM prior to removing them from the equipment room or area.

3.6.2 Control Methods

The Contractor shall use the following control methods to comply with the PELs:

- a. Local exhaust ventilation equipped with HEPA filter dust collection systems;
- b. Enclosure or isolation of processes producing asbestos dust;
- c. Ventilation of the regulated area to move contaminated air away from the breathing zone of employees and toward a filtration or collection device equipped with a HEPA filter;
- d. Use of other work practices and engineering controls;

- e. Where the feasible engineering and work practice controls described above are not sufficient to reduce employee exposure to or below the PELs, the Contractor shall use them to reduce employee exposure to the lowest levels attainable by these controls and shall supplement them by the use of respiratory protection that complies with paragraph, RESPIRATORY PROTECTION PROGRAM.

3.6.3 Unacceptable Practices

The following work practices and engineering controls shall not be used for work related to asbestos or for work which disturbs ACM, regardless of measured levels of asbestos exposure or the results of initial exposure assessments:

- a. High-speed abrasive disc saws that are not equipped with point of cut ventilator or enclosures with HEPA filtered exhaust air.
- b. Compressed air used to remove asbestos, or materials containing asbestos, unless the compressed air is used in conjunction with an enclosed ventilation system designed to capture the dust cloud created by the compressed air.
- c. Dry sweeping, shoveling, or other dry clean-up of dust and debris containing ACM.
- d. Employee rotation as a means of reducing employee exposure to asbestos.

3.6.4 Class I Work Procedures

In addition to requirements of paragraphs Mandated Practices and Control Methods, the following engineering controls and work practices shall be used:

- a. A Competent Person shall supervise the installation and operation of the control system.
- b. For jobs involving the removal of more than 25 feet or 10 square feet of TSI or surfacing material, the Contractor shall place critical barriers over all openings to the regulated area.
- c. HVAC systems shall be isolated in the regulated area by sealing with a double layer of plastic or air-tight rigid covers.
- d. Impermeable dropcloths (6 mil or greater thickness) shall be placed on surfaces beneath all removal activity.
- e. Objects within the regulated area shall be handled as specified in paragraph OBJECTS.
- f. Where a negative exposure assessment has not been provided or where exposure monitoring shows the PEL was exceeded, the regulated area shall be ventilated to move contaminated air away from the employee's breathing zone toward a HEPA unit or collection device.

3.6.5 Specific Control Methods for Class I Work

In addition to requirements of paragraph Class I Work Procedures, Class I asbestos work shall be performed using the control methods identified in the subparagraphs below.

3.6.5.1 Negative Pressure Enclosure (NPE) System

The NPE system shall provide at least 4 air changes per hour inside the containment. The local exhaust unit equipment shall be operated 24 hours per day until the containment is removed, and shall be leak-proof to the filter and equipped with HEPA filters. The NPE shall be smoke tested for leaks at the beginning of each shift. Local exhaust equipment shall be sufficient to maintain a minimum pressure differential of minus 0.02 inch of water column relative to adjacent, unsealed areas. Pressure differential shall be monitored continuously, 24 hours per day, with an automatic manometric recording instrument. Pressure differential recordings shall be provided daily on the same day collected. Readings shall be reviewed by the Contractor's Competent Person and CIH prior to submittal. The Contracting Officer shall be notified immediately if the pressure differential falls below the prescribed minimum. The building ventilation system shall not be used as the local exhaust system for the regulated area. The local exhaust system shall terminate outdoors unless an alternate arrangement is allowed by the Contract Officer. All filters used shall be new at the beginning of the project and shall be periodically changed as necessary and disposed of as ACM waste.

3.6.5.2 Glovebag Systems

The glovebag system shall be used to remove ACM from straight runs of piping and elbows and other connections. Glovebags shall be used without modification and shall be smoke-tested for leaks and any leaks sealed prior to use.

3.6.5.3 Mini-Enclosures

Single bulkhead containment or mini-containment may be used if the disturbance or removal can be completely contained by the enclosure with the following specifications and work practices.

3.6.5.4 Wrap and Cut Operation

Prior to cutting pipe, the asbestos-containing insulation shall be wrapped with polyethylene and securely sealed with duct tape to prevent asbestos becoming airborne as a result of the cutting process.

3.6.6 Class II Work

In addition to the requirements of paragraphs Mandated Practices and Control Methods, the following engineering controls and work practices shall be used:

- a. A Competent Person shall supervise the work.
- b. For indoor work, critical barriers shall be placed over all openings to the regulated area.
- c. Impermeable dropcloths shall be placed on surfaces beneath all removal activity.

3.6.8 Specific Control Methods for Class III Work – Not Used

3.6.9 Specific Control Methods for Class IV Work

Class IV jobs shall be conducted using wet methods, HEPA vacuums, and prompt clean-up of debris containing ACM. Employees cleaning up debris and waste in a regulated area where respirators are required shall wear the selected respirators.

3.6.11 Cleaning After Asbestos Removal

After completion of all asbestos removal work, surfaces from which ACM has been removed shall be wet wiped or sponged clean, or cleaned by some equivalent method to remove all visible residue. Run-off water shall be collected and filtered through a dual filtration system. A first filter shall be provided to remove fibers 20 micrometers and larger, and a final filter provided that removes fibers 5 micrometers and larger. After the gross amounts of asbestos have been removed from every surface, remaining visible accumulations of asbestos on floors shall be collected using plastic shovels, rubber squeegees, rubber dustpans, and HEPA vacuum cleaners as appropriate to maintain the integrity of the regulated area. When TSI and surfacing material has been removed, workmen shall use HEPA vacuum cleaners to vacuum every surface. Surfaces or locations which could harbor accumulations or residual asbestos dust shall be checked after vacuuming to verify that no asbestos-containing material remains; and shall be re-vacuumed as necessary to remove the ACM.

3.7 FINAL CLEANING AND VISUAL INSPECTION

Upon completion of abatement, the regulated area shall be cleaned by collecting, packing, and storing all gross contamination. A final cleaning shall be performed using HEPA vacuum and wet cleaning of all exposed surfaces and objects in the regulated area. Upon completion of the cleaning, the Contractor shall conduct a visual pre-inspection of the cleaned area in preparation for a final inspection before final air clearance monitoring and recleaning, as necessary. Upon completion of the final cleaning, the Contractor and the Contracting Officer shall conduct a final visual inspection of the cleaned regulated area in accordance with ASTM E 1368 and document the results on the Final Cleaning and Visual Inspection. If the Contracting Officer rejects the clean regulated area as not meeting final cleaning requirements, the Contractor shall reclean as necessary and have a follow-on inspection conducted with the Contracting Officer. Recleaning and follow-up reinspection shall be at the Contractor's expense.

3.8 NOT USED

3.9 EXPOSURE ASSESSMENT AND AIR MONITORING

3.9.1 General Requirements For Exposure

Exposure assessment, air monitoring and analysis of airborne concentration of asbestos fibers shall be performed in accordance with 29 CFR 1926, Section .1101, the Contractor's air monitoring plan, and as specified. Personal exposure air monitoring (collected at the breathing zone) that is representative of the exposure of each employee who is assigned to work within a regulated area shall be performed by the Contractor's CIH. Breathing zone samples shall be taken for at least 25 percent of the workers in each shift, or a minimum of 2,

whichever is greater. Air monitoring results at the 95 percent confidence level shall be calculated as shown in Table 2 at the end of this section. Preabatement and abatement environmental air monitoring shall be performed by the Contractor's CIH. Final clearance environmental air monitoring, shall be performed by the Contractor's CIH. Environmental and final clearance air monitoring shall be performed using NIOSH Pub No. 84-100 Method 7400 (PCM). For environmental and final clearance, air monitoring shall be conducted at a sufficient velocity and duration to establish the limit of detection of the method used at 0.005 f/cc. All Contractor required environmental or final clearance air monitoring, shall be at the Contractor's expense. Monitoring may be duplicated by the Government at the discretion of the Contracting Officer. Results of breathing zone samples shall be posted at the job site and made available to the Contracting Officer. The Contractor shall maintain a fiber concentration inside a regulated area less than or equal to 0.1 f/cc expressed as an 8 hour, time-weighted average (TWA) during the conduct of the asbestos abatement. If fiber concentration rises above 0.1 f/cc, work procedures shall be investigated with the Contracting Officer to determine the cause. At the discretion of the Contracting Officer, fiber concentration may exceed 0.1 f/cc but shall not exceed 1.0 f/cc expressed as an 8-hour TWA. The Contractor's workers shall not be exposed to an airborne fiber concentration in excess of 1.0 f/cc, as averaged over a sampling period of 30 minutes. Should either an environmental concentration of 1.0 f/cc expressed as an 8-hour TWA or a personal excursion concentration of 1.0 f/cc expressed as a 30-minute sample occur inside a regulated work area, the Contractor shall stop work immediately, notify the Contracting Officer, and implement additional engineering controls and work practice controls to reduce airborne fiber levels below prescribed limits in the work area. Work shall not restart until authorized by the Contracting Officer.

3.9.2 Initial Exposure Assessment

The Contractor's CIH shall conduct an exposure assessment immediately before or at the initiation of an asbestos abatement operation to ascertain expected exposures during that operation. The assessment shall be completed in time to comply with the requirements which are triggered by exposure data or the lack of a negative exposure assessment, and to provide information necessary to assure that all control systems planned are appropriate for that operation. The assessment shall take into consideration both the monitoring results and all observations, information or calculations which indicate employee exposure to asbestos, including any previous monitoring conducted in the workplace, or of the operations of the Contractor which indicate the levels of airborne asbestos likely to be encountered on the job. For Class I asbestos work, until the employer conducts exposure monitoring and documents that employees on that job will not be exposed in excess of PELs, or otherwise makes a negative exposure assessment, the Contractor shall presume that employees are exposed in excess of the PEL-TWA and PEL-Excursion Limit.

3.9.3 Negative Exposure Assessment

The Contractor shall provide a negative exposure assessment for the specific asbestos job which will be performed. The negative exposure assessment shall be provided within 2 days of the initiation of the project and conform to the following criteria:

- a. Objective Data: Objective data demonstrating that the product or material containing asbestos minerals or the activity involving such product or material cannot release airborne fibers in concentrations exceeding the PEL-TWA and PEL-Excursion Limit under those work conditions having the greatest potential for releasing asbestos.

- b. **Prior Asbestos Jobs:** Where the Contractor has monitored prior asbestos jobs for the PEL and the PEL-Excursion Limit within 12 months of the current job, the monitoring and analysis were performed in compliance with asbestos standard in effect; the data were obtained during work operations conducted under workplace conditions closely resembling the processes, type of material, control methods, work practices, and environmental conditions used and prevailing in the Contractor's current operations; the operations were conducted by employees whose training and experience are no more extensive than that of employees performing the current job; and these data show that under the conditions prevailing and which will prevail in the current workplace, there is a high degree of certainty that the monitoring covered exposure from employee exposures will not exceed the PEL-TWA and PEL-Excursion Limit.
- c. **Initial Exposure Monitoring:** The results of initial exposure monitoring of the current job, made from breathing zone air samples that are representative of the 8-hour PEL-TWA and 30-minute short-term exposures of each employee. The monitoring covered exposure from operations which are most likely during the performance of the entire asbestos job to result in exposures over the PELs.

3.9.4 Preabatement Environmental Air Monitoring

Preabatement environmental air monitoring shall be established 1 day prior to the masking and sealing operations for each regulated area to determine background concentrations before abatement work begins. Air samples shall be collected inside the building, but outside the regulated area perimeter; and inside each regulated work area. The samples shall be analyzed within 24 hours; and if any result in fiber concentration greater than 0.01 f/cc, asbestos fiber concentration shall be confirmed using NIOSH Pub No. 84-100 Method 7402 (TEM).

3.9.5 Environmental Air Monitoring During Abatement

Until an exposure assessment is provided to the Contracting Officer, environmental air monitoring shall be conducted at locations and frequencies that will accurately characterize any evolving airborne asbestos fiber concentrations. The assessment shall demonstrate that the product or material containing asbestos minerals, or the abatement involving such product or material, cannot release airborne asbestos fibers in concentrations exceeding 0.01 f/cc as a TWA under those work conditions having the greatest potential for releasing asbestos. The monitoring shall be at least once per shift at locations including, but not limited to, close to the work inside a regulated area; preabatement sampling locations; outside entrances to a regulated area; representative locations outside of the perimeter of a regulated area; inside clean room; and at the exhaust discharge point of local exhaust system ducted to the outside of a containment (if used). If the sampling outside regulated area shows airborne fiber levels have exceeded background or 0.01 f/cc, whichever is greater, work shall be stopped immediately, and the Contracting Officer notified. The condition causing the increase shall be corrected. Work shall not restart until authorized by the Contracting Officer.

3.9.6 Final Clearance Air Monitoring

Prior to conducting final clearance air monitoring, the Contractor and the Contracting Officer shall conduct a final visual inspection of the regulated area where asbestos abatement has

been completed. Final clearance air monitoring shall not begin until acceptance of the Contractor's final cleaning by the Contracting Officer. The Contractor's CIH shall conduct final clearance air monitoring using aggressive air sampling techniques as defined in EPA 560/5-85-024 or as otherwise required by federal or state requirements. The sampling and analytical method used will be NIOSH Pub No. 84-100 Method 7400 (PCM).

3.9.6.1 Final Clearance Requirements, NIOSH PCM Method

For PCM sampling and analysis using NIOSH Pub No. 84-100 Method 7400, the fiber concentration inside the abated regulated area, for each airborne sample, shall be less than 0.01 f/cc. The abatement inside the regulated area is considered complete when every PCM final clearance sample is below the clearance limit. If any confirmation sample result is greater than 0.01 asbestos f/cc, abatement is incomplete and cleaning shall be repeated. Upon completion of any required recleaning, resampling with results to meet the above clearance criteria shall be done. Recleaning and resampling costs shall be conducted at the Contractor's expense.

3.9.6.2 Air Clearance Failure

If clearance sampling results fail to meet the final clearance requirements, the Contractor shall pay all costs associated with the required recleaning, resampling, and analysis, until final clearance requirements are met.

3.9.7 Air-Monitoring Results and Documentation

Air sample fiber counting shall be completed and results provided within 24 hours (breathing zone samples), and 48 hours (environmental/clearance monitoring) after completion of a sampling period. The Contracting Officer shall be notified immediately of any airborne levels of asbestos fibers in excess of established requirements. Written sampling results shall be provided within 5 working days of the date of collection. The written results shall be signed by testing laboratory analyst, testing laboratory principal and the Contractor's CIH. The air sampling results shall be documented on a Contractor's daily air monitoring log. The daily air monitoring log shall contain the following information for each sample:

- a. Sampling and analytical method used;
- b. Date sample collected;
- c. Sample number;
- d. Sample type: BZ = Breathing Zone (Personal), P = Preabatement, E = Environmental, C = Abatement Clearance;
- e. Location/activity/name where sample collected;
- f. Sampling pump manufacturer, model and serial number, beginning flow rate, end flow rate, average flow rate (L/min);
- g. Calibration date, time, method, location, name of calibrator, signature;
- h. Sample period (start time, stop time, elapsed time (minutes));

- i. Total air volume sampled (liters);
- j. Sample results (f/cc and S/mm square) if EPA methods are required for final clearance;
- k. Laboratory name, location, analytical method, analyst, confidence level.

3.10 CLEARANCE CERTIFICATION

When asbestos abatement is complete, ACM waste is removed from the regulated areas, and final clean-up is completed, the Contracting Officer will certify the areas as safe before allowing the warning signs and boundary warning tape to be removed. After final clean-up and acceptable airborne concentrations are attained, but before the HEPA unit is turned off and the containment removed, the Contractor shall remove all pre-filters on the building HVAC system and provide new pre-filters. The Contractor shall dispose of such filters as asbestos contaminated materials. HVAC, mechanical, and electrical systems shall be re-established in proper working order. The Contractor and the Contracting Officer shall visually inspect all surfaces within the containment for residual material or accumulated debris. The Contractor shall reclean all areas showing dust or residual materials. The Contracting Officer will certify in writing that the area is safe before unrestricted entry is permitted. The Government will have the option to perform monitoring to certify the areas are safe before entry is permitted.

3.11 CLEANUP AND DISPOSAL

3.11.1 Title to ACM Materials

ACM material resulting from abatement work, except as specified otherwise, shall become the property of the Contractor and shall be disposed of as specified and in accordance with applicable federal, state and local regulations.

3.11.2 Collection and Disposal of Asbestos

All ACM waste including contaminated wastewater filters, scrap, debris, bags, containers, equipment, and asbestos contaminated clothing, shall be collected and placed in leak-tight containers such as double plastic bags sealed double wrapped polyethylene sheet; sealed fiberboard boxes; or other approved containers. Waste within the containers shall be wetted in case the container is breached. Asbestos-containing waste shall be disposed of at an EPA, state and local approved asbestos. For temporary storage, sealed impermeable containers shall be stored in an asbestos waste load-out unit or in a storage/transportation conveyance (i.e., dumpster, roll-off waste boxes, etc.) in a manner acceptable to and in an area assigned by the Contracting Officer. Procedure for hauling and disposal shall comply with 40 CFR 61, Subpart M, state, regional, and local standards.

3.11.3 Scale Weight Measurement

Scales used for measurement shall be public scales. Weighing shall be at a point nearest the work at which a public scale is available. Scales shall be standard truck scales of the beam type; scales shall be equipped with the type registering beam and an "over and under"

indicator; and shall be capable of accommodating the entire vehicle. Scales shall be tested, approved and sealed by an inspector of the State where the disposal facility is located.

3.11.4 Weigh Bill and Delivery Tickets

Copies of weigh bills and delivery tickets shall be submitted to the Contracting Officer during the progress of the work. The Contractor shall furnish the Contracting Officer scale tickets for each load of ACM weighed and certified.

3.11.5 Asbestos Waste Shipment Record

The Contractor shall complete and provide the Contracting Officer final completed copies of the Waste Shipment Record for all shipments of waste material as specified in 40 CFR 61, Subpart M and other required state waste manifest shipment records, within 3 days of delivery to the landfill. Each Waste Shipment Record shall be signed and dated by the Contractor, the waste transporter, and disposal facility operator.

TABLE 1

INDIVIDUAL WORK TASK DATA ELEMENTS

Sheet _____ of _____

There is a separate data sheet for each individual work task.

1. WORK TASK DESIGNATION NUMBER _____
2. LOCATION OF WORK TASK _____

3. BRIEF DESCRIPTION OF MATERIAL TO BE ABATED: _____

 - a. Type of Asbestos _____
 - b. Percent asbestos content _____ %
4. ABATEMENT TECHNIQUE TO BE USED _____
5. OSHA ASBESTOS CLASS DESIGNATION FOR WORK TASK _____
6. EPA NESHAP FRIABILITY DESIGNATION FOR WORK TASK
Friable _____ Non-friable Category I _____
Non-friable Category II _____
7. FORM _____ and CONDITION OF ACM: GOOD _____ FAIR _____ POOR _____
8. QUANTITY: LINEAR FT. _____, SQUARE FT. _____

NOTES:

- (1) Numeric sequence of individual work tasks (1,2,3,4, etc.) for each regulated area. Each category of EPA friability/OSHA class has a separate task.
- (2) Specific location of work (building, floor, area, e.g., Building 1421, 2nd Floor, Rm 201)
- (3) A description of material to be abated (example: horizontal pipe, cement wall panels, tile, stucco, etc.) type of asbestos (chrysotile, amosite, crocidolite, etc.); and % asbestos content.
- (4) Technique to be used: Removal = REM; Encapsulation = ENCAP; Encasement = ENCAS; Enclosure = ENCL; Repair = REP.
- (5) Class designation: Class I, II, III, or IV (OSHA designation).
- (6) Friability of materials: Check the applicable EPA NESHAP friability designation.
- (7) Form: Interior or Exterior Architectural = IA or EA; Mechanical/Electrical = ME.
Condition: Good = G; Fair = F; Poor = P.
- (8) Quantity of ACM for each work task in meters or square meters.
- (8a) Quantity of ACM for each work task in linear feet or square feet.

CERTIFICATE OF WORKER'S ACKNOWLEDGMENT

PROJECT NAME _____ CONTRACT NO. _____
PROJECT ADDRESS _____
CONTRACTOR FIRM NAME _____

EMPLOYEE'S NAME _____,
(Print) (Last) (First) (MI)

Social Security Number: _____ - _____ - _____,

WORKING WITH ASBESTOS CAN BE DANGEROUS. INHALING ASBESTOS FIBERS HAS BEEN LINKED WITH TYPES OF LUNG DISEASE AND CANCER. IF YOU SMOKE AND INHALE ASBESTOS FIBERS, THE CHANCE THAT YOU WILL DEVELOP LUNG CANCER IS GREATER THAN THAT OF THE NONSMOKING PUBLIC.

Your employer's contract for the above project requires that you be provided and you complete formal asbestos training specific to the type of work you will perform and project specific training; that you be supplied with proper personal protective equipment including a respirator, that you be trained in its use; and that you receive a medical examination to evaluate your physical capacity to perform your assigned work tasks, under the environmental conditions expected, while wearing the required personal protective equipment. These things are to be done at no cost to you. By signing this certification, you are acknowledging that your employer has met these obligations to you. The Contractor's Industrial Hygienist will check the block(s) for the type of formal training you have completed. Review the checked blocks prior to signing this certification.

FORMAL TRAINING:

_____ a. For Competent Persons and Supervisors: I have completed EPA's Model Accreditation Program (MAP) training course, "Contractor/Supervisor", that meets this State's requirements.

b. For Workers:

_____ (1) For OSHA Class I work: I have completed EPA's MAP training course, "Worker", that meets this State's requirements.

_____ (2) For OSHA Class II work (where there will be abatement of more than one type of Class II materials, i.e., roofing, siding, floor tile, etc.): I have completed EPA's MAP training course, "Worker", that meets this State's requirements.

(3) For OSHA Class II work (there will only be abatement of one type of Class II material):

_____ (a) I have completed an 8-hour training class on the elements of 29 CFR 1926, Section .1101(k)(9)(viii), in addition to the specific work practices and engineering controls of 29 CFR 1926, Section .1101(g) and hands-on training.

_____ (b) I have completed EPA's MAP training course, "Worker", that meets this State's requirements.

_____ (4) For OSHA Class III work: I have completed at least a 16-hour course consistent with EPA requirements for training of local education agency maintenance and custodial staff at 40 CFR 763, Section .92(a)(2) and the elements of 29 CFR 1926, Section .1101(k)(9)(viii), in

addition to the specific work practices and engineering controls at 29 CFR 1926, Section .1101, and hands-on training.

_____ (5) For OSHA Class IV work: I have completed at least a 2-hr course consistent with EPA requirements for training of local education agency maintenance and custodial staff at 40 CFR 763, (a)(1), and the elements of 29 CFR 1926, Section .1101(k)(9)(viii), in addition to the specific work practices and engineering controls at 29 CFR 1926, Section .1101(g) and hands-on training.

_____ c. Workers, Supervisors and the Competent Person: I have completed annual refresher training as required by EPA's MAP that meets this State's requirements.

PROJECT SPECIFIC TRAINING:

_____ I have been provided and have completed the project specific training required by this Contract. My employer's Industrial Hygienist and Competent Person conducted the training.

RESPIRATORY PROTECTION:

_____ I have been trained in accordance with the criteria in the Contractor's Respiratory Protection program. I have been trained in the dangers of handling and breathing asbestos dust and in the proper work procedures and use and limitations of the respirator(s) I will wear. I have been trained in and will abide by the facial hair and contact lens use policy of my employer.

RESPIRATOR FIT-TEST TRAINING:

_____ I have been trained in the proper selection, fit, use, care, cleaning, maintenance, and storage of the respirator(s) that I will wear. I have been fit-tested in accordance with the criteria in the Contractor's Respiratory Program and have received a satisfactory fit. I have been assigned my individual respirator. I have been taught how to properly perform positive and negative pressure fit-check upon donning negative pressure respirators each time.

MEDICAL EXAMINATION:

_____ I have had a medical examination within the last twelve months which was paid for by my employer. The examination included: health history, pulmonary function tests, and may have included an evaluation of a chest x-ray. A physician made a determination regarding my physical capacity to perform work tasks on the project while wearing personal protective equipment including a respirator. I was personally provided a copy and informed of the results of that examination. My employer's Industrial Hygienist evaluated the medical certification provided by the physician and checked the appropriate blank below. The physician determined that there:

_____ were no limitations to performing the required work tasks.

_____ were identified physical limitations to performing the required work tasks.

Date of the medical examination _____

Employee Signature _____ date _____

Contractor's Industrial
Hygienist Signature _____ date _____

SECTION 16050

SF6 GENERATOR CIRCUIT BREAKER INSTALLATION

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SECTION 16050

SF6 GENERATOR CIRCUIT BREAKER INSTALLATION

PART 1 GENERAL

1.1 GENERAL INFORMATION

This Section covers field installation of SF6 breaker retrofits. This work consists of removal of existing air-blast breaker assemblies, modification of the cabinets, installation of new SF6 breaker assemblies, modification of external power, control and annunciation connections, field testing and commissioning of the retrofitted circuit breakers. The work includes the design of external connections, removal of existing equipment, conduit, and wiring, furnishing and installing of conduit, power and control wiring, interconnecting wiring for power, control, and alarm circuits, relaying, and miscellaneous electrical accessories. The Contractor is responsible for all technical oversight and site supervision.

1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

- | | |
|------------------|----------------------------------------------------------------------------------|
| ANSI/IEEE C2 | (1997) National Electric Safety Code |
| ANSI/IEEE C37.90 | (1989; R 1994) Relays and Relay Systems Associated with Electric Power Apparatus |

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

- | | |
|------------|-----------------------------------------------------------------------------|
| ASTM A 123 | (1997) Zinc (Hot-Dip Galvanized)Coatings on Iron and Steel Products |
| ASTM A 153 | (1998) Zinc Coating (Hot-Dip) on Iron and Steel Hardware |
| ASTM A 780 | (1993a) Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings |

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)

- | | |
|------------|----------------------------------------------------------------------------------------|
| NEMA AB 1 | (1993) Molded Case Circuit Breakers and Molded Case Switches |
| NEMA C80.1 | (1994) Rigid Steel Conduit-Zinc Coated |
| NEMA FB 1 | (1993) Fittings, Cast Metal Boxes, and Conduit Bodies for Conduit and Cable Assemblies |

- NEMA ICS 2 (1993) Industrial Controls Devices Controllers and Assemblies
- NEMA WC 7 (1988; R 1996) Cross-Linked-Thermosetting-Polyethylene-Insulated Wire and Cable for the Transmission and Distribution of Electrical Energy
- NEMA WC 8 (1988; R 1996) Ethylene-Propylene-Rubber-Insulated Wire and Cable for the Transmission and Distribution of Electrical Energy

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

- NFPA 70 (1998) National Electric Code 1999 Edition

UNDERWRITERS LABORATORIES (UL)

- UL 44 (1999) Standard for Safety of Rubber Insulated Wires and Cables
- UL 50 (1995; R 1997) Enclosures for Electrical Equipment
- UL 360 (1996; R 1997) Liquid-Tight Flexible Steel Conduit
- UL 514A (1996; R 1998) Metallic Outlet Boxes
- UL 514B (1997; R 1998) Fittings for Conduit & Outlet Boxes

U.S. ARMY CORPS OF ENGINEERS (USACE)

- EM 385-1-1 (1996) Safety and Health Manual

1.3 SUBMITTALS

The following shall be submitted for approval in accordance with Section 01330 SUBMITTAL OF CONTRACT DATA. Government approval is required for all submittals with a "GA" designation; submittals having an "FIO" designation are for information only.

1.3.1 SD-01 Data

Not later than 30 days before start of work under each breaker installation task order the Contractor shall submit the following:

Electrical Equipment; GA.

Shop drawings and catalog cuts as required to indicate complete compliance with the contract specifications. As a minimum, shop drawings and catalog information shall be submitted for the following:

- a. Nameplates
- b. Cabinets

c. Terminal Blocks

d. Wire and Cable

Wire and Cable; GA.

The Contractor shall submit cable manufacturers data for approval, including multiple-conductor 600-volt cables showing cable construction, and sufficient additional data to demonstrate compliance with these specifications.

1.3.2 SD-04 Drawings

Not later than 30 days before start of work under each breaker installation task order the Contractor shall submit the following:

Drawings, diagrams and schedules; GA.

Drawings, diagrams and schedules showing all physical interfaces between Contractor-installed equipment and existing powerhouse power, lighting control and annunciation systems.

1.3.3 SD-06 Instructions

Not later than 45 days before start of field work under each breaker installation task order:

Existing circuit breaker removal procedure; GA.

Provide a procedure detailing the removal of the existing air-blast circuit breaker and components, identifying the parts which will be necessary for the installation of the retrofit kits and parts to be salvaged.

New circuit breaker retrofit installation instructions; GA.

Provide instructions detailing the installation of the new circuit breaker retrofit kits. Include cubicle modifications and include bus connections with calculations and bolting procedures.

Routine Tests; GA.

The Contractor shall submit for approval test procedures for routine field testing of the installed equipment to verify proper installation.

Operational Tests; GA.

The Contractor shall submit for approval test procedures for operational field testing of the installed equipment to verify its suitability for commercial service."

1.3.4 SD-09 Reports

Not later than 30 days before start of work under each breaker installation task order the Contractor shall submit the following:

Wire and Cable Factory Tests, Inspections, and Verifications; GA.

Certified copies of test reports including test results shall be submitted by the contractor. Lot number and reel or coil number of wire and cable tested shall be indicated on the test reports.

Wire Markers; GA.

A written certificate from an approved independent testing laboratory shall be furnished to indicate that the markers will not stain or discolor after 20 years service when subjected to an accelerated aging test while in contact with wire insulating materials. Identification on tags and markers shall be as shown on the drawings or as directed.

Within 7 calendar days after completion of tests:

Wire and Cable Field Tests; GA.

Certified copies of test reports including test results shall be submitted by the contractor. No wire or cable shall be energized until authorized. Circuit number and location for cable tested shall be indicated on the test reports.

Operational Field Tests; GA.

After testing, the Contractor shall submit certified copies of the reports.

1.4 GENERAL REQUIREMENTS

1.4.1 Materials, Equipment and Installation

Only new and unused materials and equipment shall be furnished and any defective material or equipment damaged in the course of installation shall be replaced or repaired. The installation shall as a minimum be in accordance with the National Electrical Code, NFPA 70, and the National Electrical Safety Code, ANSI C2, except where otherwise specifically shown or specified, in which case the drawings and specifications shall govern. Omission of details on the drawings or in the specifications shall not be construed as permitting deviations from Code requirements.

1.4.2 Standard Products

Material and equipment shall be the standard products of manufacturers regularly engaged in the manufacture of these products and shall essentially duplicate items that have been in satisfactory use for at least 2 years prior to bid opening.

1.4.3 Corrosion Prevention

All equipment shall be protected to prevent deterioration from corrosion. The general requirements are specified below; however, other corrosion-resisting treatments that are the equivalent of those specified may be used.

1.4.3.1 Fastenings and Fittings

Screws, bolts, nuts, pins, studs, springs, washers and other miscellaneous fastening and fittings shall be of corrosion-resistant material or shall be treated in an approved manner to render them resistant to corrosion. All fastenings which are to be exposed directly to the weather shall be of corrosion-resisting material.

1.4.3.2 Corrosion-Resisting Materials

Corrosion-resisting steel, copper, brass, bronze, copper-nickel-copper alloys are acceptable corrosion-resisting materials.

1.4.3.3 Corrosion-Resisting Treatments

Treatments shall be in accordance with ASTM A 123 or ASTM A 153.

1.4.3.4 Finish

Final painting may be done in accordance with manufacturer's standard practice.

1.4.3.5 Repair of Zinc Coatings

Where zinc coatings are destroyed by cutting, welding or other causes, the affected areas shall be regalanized. Coatings 2 ounces or heavier shall be regalanized with a suitable low-melting zinc base alloy similar to the recommendations of the American Hot-Dip Galvanizers Association to the thickness and quality of the original zinc coatings. Coatings less than 2 ounces shall be regalanized by a repair compound conforming to ASTM A 780.

1.5 STORAGE AND HANDLING

Materials and equipment shall be suitably protected from dampness, dust and physical damage in accordance with the manufactures recommendations.

1.6 PROJECT CONDITIONS

The work under this contract may be at one or more of the following locations: The Dalles, Bonneville PH-II, Chief Joseph, Libby, Lower Monumental, Little Goose, Lower Granite, Dworshak, John Day, and McNary Projects and it is subject to the safety clearances and operating procedures currently practiced by those projects. All the construction activities shall be coordinated with the respective so that the construction will not adversely affect the daily operation of the powerhouse (See Section 01010 Contractor's Site Operations). Generating unit outages are subject to the restrictions of Section 01010 paragraph 1.8 Safe Clearance Procedures. Safety clearances shall be obtained before opening, entering or working on any existing equipment such as power centers, switchboards, and alarm cabinets. All working areas shall be kept clean and orderly at all times. Tools and construction equipment shall be put away at the end of each workday. All discarded packing materials, wire ends and conduit pieces shall be placed in proper receptacles. Dust and other debris must be prevented from entering electrical cabinets when drilling holes in existing concrete. If the creation of dust cannot be avoided the work area shall be vacuum-cleaned immediately after the activity.

1.7 PAINTING

Interior and exterior steel surfaces of equipment enclosures shall be thoroughly cleaned and then, if not galvanized, shall receive a rust-inhibitive phosphatizing or equivalent treatment prior to painting. Interior surfaces shall receive not less than one coat of paint in accordance with the manufacturer's standard practice. Exterior surfaces shall be primed, filled where necessary, and given not less than two coats of synthetic enamel with semigloss finish, ANSI Indoor Light Gray No. 61 in color.

1.8 NAMEPLATES AND ESCUTCHEONS

Identifying nameplates are in additions to manufacturer's nameplates and shall be made of 1/6-inch thick laminated sheet plastic or of 1/32-inch thick anodized aluminum engraved to provide white letters on a black background. All nameplates shall be fastened to enclosures in proper positions with black finished round-head screws. In general, control switches or relays shall be provided with identifying nameplates, in addition to escutcheon plates, to show operating position as shown on approved drawings. Nameplates for cabinets shall be labeled as shown on approved drawings.

1.9 GENERATING EQUIPMENT OUTAGES

Generating equipment outages shall comply with the requirements of Section 01010 paragraph 1.8 Safe Clearance Procedures.

PART 2 PRODUCTS

2.1 CONDUIT

2.1.1 Rigid Steel

Rigid steel conduit shall conform to NEMA C80.1 and shall be zinc-coated both inside and outside by hot-dip galvanizing method.

2.1.2 Fittings

Fittings for rigid conduit shall be threaded and conform to UL 514B. Fittings for flexible conduit shall also conform to UL 514B.

2.1.3 Expansion Fittings

Expansion fittings shall be weatherproof, with an internal bonding assembly and shall provide for at least 4 inches of conduit movement.

2.2 INSULATED WIRE AND CABLE

2.2.1 General

All wire and cable used for power, lighting, control, and relaying systems provided by the Contractor shall conform to characteristics specified herein, including conductor size, stranding, number of conductors, rated circuit voltage, and cabling, for each type of service. Wire and

Cable shall be as specified under the detailed requirements of these specifications for the particular construction or use.

2.2.2 Service Conditions

Wire and cable will in general be subjected to normal conditions for general-purpose applications with the following exceptions:

- a. Wire in or near switchgear could be exposed to the maximum temperatures for which such equipment is rated.
- b. Various areas within the powerhouse and in ducts may be wet or damp.
- c. Cables installed in cable trays shall be rated for use in cable trays.

2.2.3 Governing Standards

Materials, construction and tests, unless otherwise specified, shall conform to the applicable requirements of NEMA WC 7 and NEMA WC 8. The referenced parts only of IEEE 383 and AEIC CS5 and CS6 form a part of this specification.

2.2.4 Rated Circuit Voltages

Wire and cable shall have minimum rated circuit voltages in accordance with Table 3-1 of NEMA WC 7 or WC 8. Minimum rated circuit voltage shall be 600 volts, regardless of actual operating voltage.

2.2.5 Conductors

Conductors shall conform to all the applicable requirements of Section 2 of NEMA WC 7 or Part 2 of WC 8 as applicable, and shall be annealed copper. Copper conductors may be bare, or tin- or lead-alloy-coated, if required by the type of insulation used.

2.2.5.1 Size

Minimum wire size shall be No. 12 AWG for power and lighting circuits; No. 10 AWG for current transformer secondary circuits; No. 14 AWG for potential transformer, relaying and control circuits; and No. 16 AWG for annunciator circuits.

2.2.5.2 Stranding

Conductor stranding classes cited herein shall be as defined in Appendix L of NEMA WC 7 or WC 8, as applicable. Lighting conductors No. 10 AWG and smaller shall be solid or have Class B stranding. Any conductors used between stationary and moving devices, such as hinged doors or panels, shall be Class H or K stranding. All other conductors shall have class B or C stranding.

2.2.5.3 Separator Tape

Where conductor shielding, stranding filling, or other special conductor treatment is not required, a separator tape between conductors and insulation is permitted.

2.2.6 Insulation

Insulation shall be cross-linked-thermosetting-polyethylene (XLPE) type, meeting the requirements of Section 3 or paragraph 7.7 of NEMA WC 7 as applicable, or an ethylene-propylene-rubber (EPR) type meeting the requirements of Part 3 of NEMA WC 8. Polyvinyl chloride (PVC) insulation will not be accepted.

2.2.6.1 Insulation Thickness

The insulation thickness for each conductor shall be based on its rated circuit voltage. Minimum rated circuit voltage shall be 600 volts regardless of actual operating voltage.

a. Power Cables and Single-Conductor Control Cables, Rated 2,000 Volts and Below. The insulation thickness for single-conductor cables rated 2,000 volts and below shall be as required by Table 3-1, Section 3 of NEMA WC 7 or Table 3-1, Part 3 of NEMA WC 8, as applicable. Column "A" thickness of Table 3-1 of NEMA WC 7 will be permitted only for single-conductor cross-linked thermosetting polyethylene insulated cables without a jacket. NEMA WC 8 ethylene-propylene rubber-insulated conductors shall have a jacket. Column "B" thickness shall apply to single-conductor cables that require a jacket and to individual conductors of multiple-conductor cables with an overall jacket.

b. Multiple-Conductor Control Cables. The insulation thickness of multiple-conductor control cables used for control and related purposes shall be as required by Table 7-32 of NEMA WC 7 or Table 7.5.1 of NEMA WC 8, as applicable.

2.2.7 Jackets

All cables shall have jackets meeting the requirements of Section 4 of NEMA WC 7, or Part 4 of NEMA WC 8, as applicable, and as specified herein. Individual conductors of multiple-conductor cables shall be required to have jackets only if they are necessary for the conductor to meet other specifications herein. Jackets of single-conductor cables and of individual conductors of multiple-conductor cables, shall be in direct contact and adhere or be vulcanized to the conductor insulation. Multiple-conductor cables shall be provided with a common jacket, which shall be tightly and concentrically formed around the core. Repaired jacket defects found and corrected during manufacturing are permitted if the cable, including the jacket, afterward fully meets these specifications and the requirements of the applicable standards.

2.2.7.1 Jacket Material

The jacket shall be one of the materials listed below, in accordance with the paragraphs cited in parentheses below, of NEMA WC 8. Polyvinyl chloride compounds will not be permitted. Variations from the materials required below will be permitted only if approved for each specific use, upon submittal of sufficient data to prove that they exceed all specified requirements for the particular application.

- a. Heavy-duty black neoprene (4.4.3).
- b. Heavy-duty chlorosulfonated polyethylene (4.4.10).
- c. Heavy-duty cross-linked (thermoset) chlorinated polyethylene (4.4.11).

2.2.7.2 Jacket Thickness

The minimum thickness of the jackets at any point shall be not less than 80 percent of the respective nominal thickness specified below:

a. Multiple-Conductor Cables. Thickness of the jackets of the individual conductors of multiple-conductor cables shall be as required by Section 4, Table 4-6 of NEMA WC 7 or Part 4, Table 4-4 of NEMA WC 8, and shall be in addition to the conductor insulation thickness required by Column B of Table 3-1 of the applicable NEMA publication for the insulation used. Thickness of the outer jackets or sheaths of the assembled multiple-conductor cables shall be as required by Section 4, Table 4-7, of NEMA WC 7 or Part 4, Table 4-5, of NEMA WC 8.

b. Single-Conductor Cables. Single conductor cables, shall have a jacket thickness as specified in Section 4, Table 4-4 of NEMA WC 7 or Part 4, Table 4-2 of NEMA WC 8.

2.2.8 Identification

2.2.8.1 Color Coding

Insulation of individual conductors of multiple conductor cables shall be color coded in accordance with paragraph 5.3 of NEMA WC 8, except that colored braids will not be permitted. Only one color-code method shall be used for each cable construction type. Control cable color-coding shall be in accordance with Table K-2, Appendix K of NEMA WC 8. Power cable color-coding shall be black for Phase A, red for Phase B, blue for Phase C, white for grounded neutral, and green for an insulated grounding conductor, if included.

2.2.9 Cabling

Individual conductors of multiple-conductor cables shall be assembled with flame and moisture-resistant fillers, binders, and a lay conforming to Part 5 of NEMA WC 8, except that flat twin cables will not be permitted. Fillers shall be used in the interstices of multiple-conductor round cables with a common covering where necessary to give the completed cable a substantially circular cross section. Fillers shall be of a non-hygroscopic material, compatible with the cable insulation, jacket, and other components of the cable. The rubber filled or other approved type of binding tape shall consist of a material that is compatible with the other components of the cable and shall be lapped at least 10 percent of its width.

2.2.10 Dimensional Tolerance

The outside diameters of single-conductor cables and of multiple-conductor cables shall not vary more than 5 percent and 10 percent, respectively, from the manufacturer's published catalog data.

2.2.11 Inspection and Tests

Inspection and tests of wire and cable furnished under these specifications shall be made by and at the plant of the manufacturer, and shall be witnessed by the Contracting Officer, unless waived in writing. The Government may perform further tests before or after installation. Testing in general shall comply with Section 6 of NEMA WC 7 or Part 6 of WC 8. Specific tests required for particular materials, components, and completed cables shall be as specified in the sections of the above standards applicable to those materials, components, and cable types. Tests shall also be performed in accordance with the additional requirements specified below.

2.2.11.1 Flame Tests

All multiple-conductor and single-conductor cable assemblies shall pass the IEEE 383 flame tests, paragraph 2.5, using the ribbon gas burner. Single-conductor cables and individual conductors of multiple-conductor cables shall pass the flame test of NEMA WC 7, paragraph 7.7.3.1.3. If such tests, however, have previously been made on identical cables, these tests need not be repeated. Instead, certified reports of the original qualifying tests shall be submitted.

2.2.11.2 Independent Tests

The Government may at any time make visual inspections, continuity or resistance checks, insulation resistance readings, power factor tests, or dc high-potential tests at field test values. A cable's failure to pass these tests and inspections, or failure to produce readings consistent with acceptable values for the application, will be grounds for rejection of the cable.

2.2.11.3 Reports

Five certified copies of reports indicating the results of tests made shall be furnished. Lot number and reel or coil number of wire and cable tested shall be indicated on the test reports. Wire or cable without test reports shall be rejected.

2.2.12 Installation Instructions

The following information shall be provided by the cable manufacturer for each size, conductor quantity, and type of cable furnished.

2.2.12.1 Minimum bending radius, in inches

For multiple-conductor cables, this information shall be provided for both the individual conductors and the multiple-conductor cable.

2.2.12.2 Pulling tension and sidewall pressure limits, in pounds.

2.2.12.3 Upon request, compatibility of cable materials and construction with specific materials and hardware manufactured by others shall be stated. Also, if requested, recommendations shall be provided for various cable operations, including installing, splicing, terminating, etc.

2.2.13 Packaging and Marking

The cables shall be furnished one length to a reel or coil. Each length, and the outside of each reel or coil, shall be plainly marked or tagged to indicate the cable length, voltage rating, conductor size, and manufacturer's lot number and reel number. Cables for exclusively dc applications shall be identified as such. Reels shall remain the property of the Contractor.

2.3 GROUNDING

2.3.1 Grounding Conductors

Ground conductors shall be bare unless routed along with the phase conductors in a motor feeder circuit. The ground conductors shall be soft, or medium hard drawn Class A or Class B stranded copper cables.

2.3.2 Below Grade Connections

All embedded or buried ground connections and taps in equipment mounting pads shall be made by a molded powdered metal weld similar and approved equal to Cadweld Electrical Connection.

2.4 OUTLET AND JUNCTION BOXES

2.4.1 Sheet Metal

Sheet metal boxes and covers shall conform to UL 514A.

2.4.2 Cast Boxes

Cast boxes and covers shall conform to NEMA FB 1. All cast boxes shall be supplied with cast covers and integral cast hubs or with factory-brazed hubs. All hubs shall be factory threaded.

2.5 SPECIAL BOXES AND ENCLOSURES

2.5.1 General

Special boxes shall be provided, as indicated in this specification or as required. Boxes of 170 cubic inches interior volume or less are considered as conduit outlet boxes. All boxes, enclosures and cabinets having an interior volume in excess of 170 cubic inches will be considered to be special boxes insofar as compliance with these specifications is concerned. Conduit entrance locations shall be as required.

2.5.2 Steel Cabinets and Boxes

Steel cabinets, junction, splice and pull boxes, and other steel boxes and enclosures and their doors and trim shall conform to Underwriter's Laboratories, Inc., UL 50 for Cabinets and Boxes except as noted below. Sheet steel used in cabinets, special boxes or enclosures, shall be not lighter than No. 14 U.S. Standard gage and cover fastening screws shall be placed not more than twelve inches apart along the perimeter of a box. All special steel boxes, cabinets, doors, and covers shall be made of galvanized sheet steel or shall be hot-dip galvanized after

fabrication. Junction and pull boxes shall be furnished with covers of the same gage metal as the box. Approved bonding hubs shall be provided where required by the type of enclosure. T & B "Bullet Hub" or Myers "Scru-tite" fittings are acceptable. Concentric ring knockouts will not be allowed for conduit entrances. Drilling in the field, of cabinets and boxes to be embedded will be permitted only when approved. Galvanizing damaged during fabrication or field installation or drilling shall be repaired as specified in paragraph 1.4.3.5. Control cabinets and other surface mounted enclosures shall be NEMA Type 12. Holes will be permitted in NEMA Type 12 enclosures for mounting provisions and for cover mounted devices. Doors, handles, trim, panels and gutters shall be furnished as specified or required.

2.5.3 Doors, Covers, Cabinet Trim and Hardware

Each door shall be equipped with flush or semi-concealed hinges and, if the height exceeds 36 inches, with a vault type handle and a three point catch. NEMA Type 12 enclosures shall have hinged covers and shall be modified to have door handles equipped with three point catches in lieu of retained fasteners. Except for panelboard cabinets, double doors or doors in pairs shall be provided wherever the width of a door opening exceeds 24 inches or the height of the opening exceeds 36 inches. Locks shall be provided for cabinets in which 125-Volt dc, 480-volt ac, or 15 kV equipment is exposed when the door is open. The locks shall be master keyed using interchangeable 6-pin tumbler mechanisms in removable cores as manufactured by the Best Universal Lock Co., Inc. Two control keys for the removal of the interchangeable cores of the master key system and two master keys for the locks of each cabinet shall be furnished. Identifying nameplates shall be provided on the front of the doors with designations as shown.

2.6 TERMINATIONS

2.6.1 Terminal Blocks

Terminal blocks for control wiring shall be molded or fabricated type with barriers, rated not less than 600 volts. The terminals shall be removable and of binding, fillister, or washer-head screw type, or stud type with contact and locking nuts. Each terminal shall be not less than No. 10 in size with length and space for connecting at least 2 indented terminal connectors for No. 10 conductors to each terminal. Terminal blocks shall be provided to terminate all external cables. They shall be the sliding link disconnect type and shall contain at least four spare terminals or 10 percent spare terminals which ever is greater.

2.6.2 Instrument Transformer Secondaries

Short-circuiting type terminal blocks meeting the requirements above shall be furnished for all current transformer secondary leads and shall have provision for shorting together all leads from each current transformer without first opening any circuit. Minimum size or shorting type terminal block shall be twelve (12) point.

2.6.3 Terminal Block Marking

White or other light colored marking strips, shall be provided for circuit designation. Each connected terminal of each block shall have the circuit designation or wire number placed on the marking strip with permanent marking fluid. Two reversible or spare marking strips shall be furnished with each block and at least 10 percent spare terminals shall be provided.

2.6.4 Power and Lighting Terminations

Conductors for power and lighting circuits rated 600 volts and below shall be terminated on screw or stud terminals or a separate adjacent terminal block.

PART 3 EXECUTION

3.1 GENERAL

Unless otherwise specified, execution of the work shall be in accordance with the National Electrical Code, NFPA 70, the National Electrical Safety Code, ANSI C2, and with the U.S. Army Corps of Engineers Safety and Health Manual, EM 385-1-1.

3.2 DEMOLITION

Existing circuit breakers and appurtenances shall be removed according to the approved circuit breaker removal plan. Electrical conduits and wiring shall be removed back to the location identified in the circuit breaker retrofit installation instructions for the new electrical power and control interface cabinets. Compressed air piping shall be removed back to an approved location where existing piping shall be sealed using threaded caps. Unneeded hangars and fasteners shall be removed. Holes in floors and walls shall be patched and painted to match existing surfaces.

3.3 INSTALLATION

New circuit breakers shall be installed according to the approved circuit breakers retrofit installation instructions. Circuit breakers shall not extend across monolith expansion joints nor cover floor drains. Floor drains may be relocated per the approved circuit breaker retrofit installations. Suitable floor slope to drains must be retained. No drain shall be located closer than 12 inches to the new circuit breakers.

3.3.1 Interface to Powerhouse Systems

Connect retrofitted circuit breakers to existing circuit breaker power, control, and annunciation wiring on terminal strips in new terminal cabinets. Terminal cabinets shall be located as near the breakers as possible and they shall be accessible from floor level. Existing conduits shall be modified and extended as needed to reach the new terminal cabinets. The Contractor shall identify the location of new cabinets and supply for approval terminal cabinet details and wiring diagrams. Terminal cabinets shall meet requirements for special boxes and enclosures in Paragraphs 2.5 and 3.6. The Contractor shall notify the Contracting Officer in writing if existing powerhouse wiring is not suitable for reuse.

3.3.2 Circuit Breaker Installation Areas

New circuit breakers shall be installed within the areas defined on the drawings (MAIN UNIT BREAKER FOOTPRINTS, VARIOUS LOCATIONS) included under Attachment J4, as shown.

Detail sketches include footprints for Dworshak Unit 13, John Day Dam and McNary Dam which are furnished for information only and are not included as a prepriced item on the Schedule. Any work required for Dworshak Unit 13, John Day Dam or McNary Dam will be added under the requirements for a non-prepriced item.

3.4 INTERFACE TO POWERHOUSE SYSTEMS

Connect retrofitted circuit breakers to existing circuit breaker power, control, and annunciation wiring on terminal strips in new terminal cabinets. Terminal cabinets shall be located as near the breakers as possible and they shall be accessible from floor level. Existing conduits shall be modified and extended as needed to reach the new terminal cabinets. The Contractor shall identify the location of new cabinets and supply for approval terminal cabinet details and wiring diagrams. Terminal cabinets shall meet requirements for special boxes and enclosures in Paragraphs 2.5 and 3.6. The Contractor shall notify the Contracting Officer in writing if existing powerhouse wiring is not suitable for reuse.

3.5 CONDUIT SYSTEMS

All leads from devices and accessories shall be run in conduit and connected to terminal blocks. All conduit runs installed shall be terminated at devices or connection boxes and at the terminal cabinet in tapped holes having not less than 3-1/2 pipe threads, or in standard pipe-threaded couplings or nipples integral with or welded to the device or cabinet. Similar pipe-threaded connections shall be provided on the terminal cabinet for attaching incoming conduit. Other conduit connections shall be made with cast metal boxes and outlet fittings having threaded outlets and gasketed covers. No running threads on conduit will be permitted. Conduit, fittings and accessories shall be installed in accordance with details shown and as specified herein. All conduit shall be rigid galvanized steel.

a. All conduit bends shall have a radius of not less than ten times the conduit's inside diameter.

b. No threadless fittings or running-thread couplings shall be used on conduit runs.

c. Metal conduits shall be cut only with a tool approved for the purpose. Roller type pipe cutters shall not be used on conduits. All cuts shall be square and the conduit opening shall not be constricted. After cutting and threading, conduit ends shall be reamed to remove rough edges and burrs and the entire conduit shall be thoroughly cleaned to remove all cuttings, dirt and oil from its interior. Threads shall be clean cut. Threaded joints in metal conduit and terminations in cast boxes shall have the threads coated with an approved conductive joint compound, and shall be screwed tight to make the joint watertight and to provide electrical continuity of a given conduit system. Suitable watertight conduit hubs and bushings shall be provided where conduit terminates within a box, terminal cabinet or accessory that has no threaded hub or fitting to receive threaded conduit.

d. All conduit shall be installed in such a manner as to insure against trouble from the collection of trapped condensation and all runs shall be arranged to avoid traps wherever possible.

e. Pull boxes shall be furnished and installed, complete with covers, in conduit runs as required by the NEC and good practice in the trade, regardless of whether the boxes are specified on the drawings.

f. Conduit shall be installed with a minimum of bending and cutting. Conduit shall be rigidly attached with approved supports and anchors to the surface over which it is run. The maximum spacing of supports for the exposed conduit shall be 8 feet. Supports for exposed

conduit on concrete surfaces shall be fastened securely to the concrete with approved anchors and clamp backs. Wooden, fibrous, or similar plugs inserted into the concrete will not be accepted.

g. The entire metallic conduit system installed by the Contractor shall be electrically continuous and thoroughly grounded. No welding or brazing of the grounding conductor to the conduit will be allowed. All grounding connections to the conduit shall be made by means of grounding bushings or by an approved pressure type connector.

3.6 SPECIAL BOXES AND ENCLOSURES INSTALLATION

All boxes and cabinets shall be straight and true with horizontal or vertical structural lines. The final installation shall not be out of plumb more than 1/4-inch over the full length nor be deformed more than 1/16-inch per linear foot nor more than a total of 1/4-inch in any surface. Exposed cabinets on concrete surfaces shall be fastened with anchors near each corner. The gaskets shall be treated with graphite or other approved paste at the time the cover is fastened to the box.

3.7 WIRE AND CABLE INSTALLATION

For the purposes of this contract, the term "internal wiring" shall be used to designate the Contractor's factory installed wiring furnished with the equipment, and the term "external wiring" shall be used to designate field installed wiring.

3.7.1 External Wiring

All external wire and cable shall conform to paragraph 2.2 INSULATED WIRE AND CABLE of these specifications. All wire and cable shall be installed in accordance with National Electrical Code requirements. All necessary materials, tools and equipment required for proper handling and installation of wire and cable in conduits, cable trays, and elsewhere shall be furnished. Except as otherwise indicated, each wire and cable shall be connected to the associated equipment at both ends, and new cable shall be continuous and without splices between the equipment termination points. Wire and cable shall be pulled in a manner which will preclude damage to the conductor, insulation or jacket. Any cable damaged during installation shall be removed and replaced. Installation of wire and cable shall include installation of all supporting devices and all terminations required to complete the circuits as required. Wire and cable shall not be pulled into conduit runs until the conduit has been checked and determined to be clean and dry by pulling a clean, dry, tight-fitting rag through each run. Only approved lubricants may be used to facilitate pulling of conductors. Cable trays shall be cleaned of all dirt and trash before pulling cable. Cables shall be placed straight and parallel in the trays.

3.7.2 Terminations

All cable and wire connections shall be made at terminal blocks. The shield and shield insulating jacket of shielded signal cables and conductors, if applicable, shall be maintained to a point as close to the terminals as possible. The shield insulating jacket shall not be stripped from the shield except where necessary to make the ground connection.

3.7.3 Identification

All multiple-conductor cables shall be clearly identified with the cable designation by either embossed one-inch diameter brass tags or by embossed aluminum band markers. Tags or band markers shall be securely fastened to the cables at each termination, junction or pull box, where cables enter or leave cable trays, and as required at other points of access. Wires and individual conductors of control and power cables shall be identified with non-metallic tube-type markers at each termination. Tube-type markers shall be suitable for contact with rubber or neoprene or plastic. Tubing shall be sized to fit the wire being marked and shall have black marking on a light colored background. Installed markers shall be uniform in position on the wire and legends shall be visible when wires are terminated on terminal blocks or equipment.

3.7.4 Tests

After installation, but just prior to terminal connection, each conductor shall be tested as follows:

- a. A 1000-volt "Megger" test shall be performed with all other conductors in each cable or conduit grounded. The final insulation resistance of each conductor shall not be less than one megohm.
- b. A continuity test of each conductor from terminal to terminal shall be performed.
- c. Suitable records shall be kept of all tests, indicating the "Megger" readings, high voltage tests, continuity test, and conductor identification markings. A duplicate record of all tests shall be furnished the Contracting Officer. Prior to testing, the test record form shall be submitted for approval.
- d. Any length of wire or cable failing the above tests shall be removed and replaced.
- e. The Contractor shall furnish all instruments and personnel for these tests.
- f. Tests shall be witnessed by the Contracting Officer and the test form shall provide room for the Contracting Officer's signature. Test reports shall be submitted in accordance with Section 01330 SUBMITTAL OF CONTRACT DATA.

3.8 FIELD ACCEPTANCE TESTS

All tests required herein shall be witnessed by the Contracting Officer unless waived in writing. The Contractor shall notify the Government sufficiently in advance of the date of the tests so that arrangements can be made for the Contracting Officer to be present at the tests. The costs of performing all tests shall be borne by the Contractor and shall be included in the prices bid for the items of equipment. The Contractor shall supply all equipment and manpower required to implement the approved testing plan.

3.8.1 Routine Tests

After completion of the installation of the equipment and accessories, perform routine tests as necessary to insure proper installation. Routine tests shall include but not limited to inspections and tests for location and mechanical alignment, damage to equipment porcelain or painted surfaces, electrical continuity of external circuits, polarity and phase rotation as necessary, and

to such other tests as described in the specific paragraph for the equipment. Submit a test plan, for approval, listing the routine tests to be conducted. The tests shall be witnessed by a GQAR.

3.8.2 Operational Tests

After routine tests are complete, perform operational tests to verify the suitability of the equipment for commercial operation. A field operational test plan for use by installation personnel shall be submitted for approval. The test plan should list all tests and measurements to be performed on the circuit breaker to verify its suitability for service. Tests shall include functional checks and/or calibration tests of devices including, but not limited to, control switches, limit switches, gas density monitors, pressure gauges and switches, operating mechanism and capacitive trip device. Proper operation of control circuits shall be verified. A hipot test and tests of contact resistance shall be performed. Interrupter assemblies shall be tested for gas leakage. The breaker shall be tested for timing and travel using the breaker-mounted transducer and the Project's breaker motion analyzer. The test plan shall include test instructions, test and calibration record sheets to be filled out by test personnel and pass-fail criteria.

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SECTION 16353

15.5 kV SF₆ CIRCUIT BREAKER RETROFITS

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SECTION 16353

15.5 kV SF₆ CIRCUIT BREAKER RETROFITS

PART 1 GENERAL

1.1 DESCRIPTION OF WORK

This section specifies the detailed requirements for the design and manufacture of a station-type generator circuit breaker retrofit for application to main generator air-blast circuit breakers used indoors at hydro powerhouses. The circuit breakers shall be three-pole, single-throw, fully automatic, single pressure interrupter units with a hydraulic or spring operating mechanism. The breakers shall use sulfur hexafluoride (SF₆) gas as a dielectric and as an arc extinguishing medium. Application of the specified equipment will be in a hydroelectric powerhouse at an altitude below 3,300 feet, within ambient temperature extremes of 0°C to + 40°C.

1.2 REFERENCES

The publications form a part of this specification to the extend references. The publications are referred to in the text by basic designation only.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)

ASME	Boiler and Pressure Vessel Codes - 1989 with Addenda through summer 1992
ASME B1.1	(1989) Unified Inch Screw Threads (UN and UNR Thread Form)
ASME B1.20.1	(1983; R 1992) Pipe Threads General Purpose (Inch)

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM B88	(1996) Standard Specification for Seamless Copper Water Tube.
ASTM A123	(1997) Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products E1-1998
ASTM A153	(1998) Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware
ASTM D2472	(1992; R 1997) Specification for Sulfur Hexafluoride

AMERICAN WELDING SOCIETY (AWS)

AWS D1.1	(1998) Structural Welding Code - Steel
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INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)

IEEE C37.04	(1979) Rating Structure for AC High Voltage Circuit Breakers rated on a Symmetrical Current Basis. (Reapproved 1989, with Supplements through C37.04-1991)
IEEE C37.06	(1997) Preferred Ratings and Related Required Capabilities for AC High Voltage Circuit Breakers Rated on a Symmetrical Current Basis
IEEE C37.09	(1979; R 1989) Test Procedure for AC High Voltage Circuit Breakers Rated on a Symmetrical Current Basis
IEEE C37.010	(1979; R 1989) Application Guide for AC High Voltage Circuit Breakers Rated on a Symmetrical Current Basis (with Supplements through C37.010E-1991)
IEEE C37.011	(1994) Application Guide for Transient Recovery Voltage for AC High Voltage Circuit Breakers Rated on a Symmetrical Current Basis
IEEE C37.012	(1979) Application Guide for Capacitance Current Switching for AC High Voltage Circuit Breakers Rated on a Symmetrical Current Basis. (Reapproved 1989)
IEEE C37.013	(1997) AC High-Voltage Generator Circuit Breakers Rated on a Symmetrical Current.
IEEE C37.20.2	(1993) Metal-Clad and Station-Type Cubicle Switchgear.
IEEE C37.59	(1996) Requirements for Conversion of Power Switchgear Equipment.
IEEE C37.100	(1992) Standard Definitions of Power Switchgear

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION PUBLICATIONS(NEMA)

NEMA AB 1	(1993) Molded Case Circuit Breakers
NEMA CC 1	(1993) Electric Power Connectors for Substations
NEMA FB 1	(1988) Fittings, Cast Metal Boxes, and Conduit Bodies for Conduit and Cable Assemblies
NEMA ICS 1	(1993) General Standards for Industrial Control and Systems
NEMA ICS 2	(1993) Industrial Control Devices, Controllers and Assemblies
NEMA ICS 6	(1993) Enclosures for Industrial Control and Systems

NEMA MG 1	(1998) Motors and Generators
NEMA C80.1	(1994) Rigid Steel Conduit - Zinc Coated
UNDERWRITERS LABORATORIES INC. (UL)	
UL 44	(1999) Rubber-Insulated Wires and Cables
UL 360	(1996; R 1997) Liquid-Tight Flexible Steel Conduit
UL 489	(1996; R 1998) Safety Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit-Breaker Enclosures
UL 1581	(1997; R 1998) Reference Standard for Electrical Wires, Cables, and Flexible Cords.

1.3 SUBMITTALS

Government approval is required for all submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL OF CONTRACT DATA. The time of submittal shall be in accordance with Section 01330 SUBMITTAL OF CONTRACT DATA , unless otherwise indicated below.

1.3.1 SD-01 Data

Within 60 days after receipt of signed task order for breaker design and development:

Descriptive Specifications for the following; GA.

- a. 15.5 kV Circuit Breaker, Relays, Meters, Instrument Transformers and Accessories.
- b. Wire and Cable.

1.3.2 SD-04 Drawings

Within 80 days after receipt of signed task order for breaker design and development:

15.5 kV Circuit Breaker and Switchgear Cubicle Modifications; GA.

- a. Outline drawings and mounting details of all equipment to be furnished under this contract.
- b. Equipment arrangement/outline drawings of the interrupter pole, and operating mechanism with dimensions showing the new equipment in the cubicles indicating clearances.
- c. Electrical schematic and control diagrams showing locations and connections of components, terminal blocks, and conductor designations.
- d. Diagrams of SF₆ gas and other piping systems and locations.

e. Drawings of miscellaneous devices including piping system components, stored operating energy mechanisms and maintenance lockout devices, connections and safety valves.

1.3.3 SD-06 Instructions

Not later than 120 days after receipt of task order for fabrication and delivery of circuit breakers:

15.5 kV Circuit Breaker Operation and Maintenance Manuals; GA.

The manual shall provide complete operation, maintenance and service instructions for the circuit breaker interrupters, operating mechanism, protection devices, meters, transducers, spare parts, relays and other accessories.

1.3.4 SD-07 Schedules

Within 90 days after receipt of signed task order for breaker design and development:

Accessories and spare parts list; GA.

1.3.5 SD-09 Reports

Not later than 7 calendar days after tests are performed:

Circuit Breaker tests; GA.

SF₆ gas tests; GA.

PART 2 PRODUCTS

2.1 CIRCUIT BREAKER RATING

2.1.1 General

The circuit breakers shall be rated on a symmetrical current basis. Ratings shall be as defined in IEEE C37.04, Part 5, and as supplemented below. Circuit breakers identified as fan cooled must retain fans to properly ventilate reused disconnect switch cubicles. In the interest of parts interchangeability, circuit breakers at some plants are shown with a common continuous current rating that corresponds to the highest rated circuit breakers at that facility. Circuit breaker manuals shall clearly display the actual rated continuous current for each circuit breaker/disconnect switch assembly based on the lower of the disconnect switch or circuit breaker ratings.

2.1.2 Basic Ratings

Basic ratings shall be as follows:

The Dalles Powerhouse Units 1 – 22

- | | |
|-----------------------------------------|------|
| a. Rated maximum voltage, kV, rms | 15.5 |
| b. Rated frequency, Hz | 60 |

c. Rated continuous current, amperes, rms	5,000
d. Rated short circuit current, kA, rms	100
e. Minimum short circuit close and latch, kA crest	274
f. Impulse withstand voltage, full-wave, kV, (BIL) crest..	110
g. Convection cooled	

Bonneville Second Powerhouse Units 11 – 18

a. Rated maximum voltage, kV, rms	15.5
b. Rated frequency, Hz	60
c. Rated continuous current, amperes, rms	4,000
d. Rated short circuit current, kA, rms	100
e. Minimum short circuit close and latch, kA crest	274
f. Impulse withstand voltage, full-wave, kV, (BIL) crest...	110
g. Convection cooled	

Chief Joseph Powerhouse Units 17 – 27

a. Rated maximum voltage, kV, rms	15.5
b. Rated frequency, Hz	60
c. Rated continuous current, amperes, rms	5,000
d. Rated short circuit current, kA, rms	100
e. Minimum short circuit close and latch, kA crest	274
f. Impulse withstand voltage, full-wave, kV, (BIL) crest..	110
g. Convection cooled	

Libby Powerhouse Units 1 – 4

a. Rated maximum voltage, kV, rms	15.5
b. Rated frequency, Hz	60
c. Rated continuous current, amperes, rms	5,500
d. Rated short circuit current, kA, rms	63
e. Minimum short circuit close and latch, kA crest	173
f. Impulse withstand voltage, full-wave, kV, (BIL) crest..	110
g. Fan cooled	

Lower Monumental Powerhouse Units 1 – 6

a. Rated maximum voltage, kV, rms	15.5
b. Rated frequency, Hz	60
c. Rated continuous current, amperes, rms	7,000
d. Rated short circuit current, kA, rms	120
e. Minimum short circuit close and latch, kA crest	329
f. Impulse withstand voltage, full-wave, kV, (BIL) crest..	110
g. Fan cooled	

Little Goose Powerhouse Units 1 – 6

a. Rated maximum voltage, kV, rms	15.5
b. Rated frequency, Hz	60
c. Rated continuous current, amperes, rms	7,000
d. Rated short circuit current, kA, rms	120
e. Minimum short circuit close and latch, kA crest	329
f. Impulse withstand voltage, full-wave, kV, (BIL) crest..	110
g. Fan cooled	

Lower Granite Powerhouse Units 1 – 6

a. Rated maximum voltage, kV, rms	15.5
b. Rated frequency, Hz	60
c. Rated continuous current, amperes, rms	7,000
d. Rated short circuit current, kA, rms	120
e. Minimum short circuit close and latch, kA crest	329
f. Impulse withstand voltage, full-wave, kV, (BIL) crest..	110
g. Fan cooled	

Dworshak Powerhouse Units 1 – 2

a. Rated maximum voltage, kV, rms	15.5
b. Rated frequency, Hz	60
c. Rated continuous current, amperes, rms	5,000
d. Rated short circuit current, kA, rms	120
e. Minimum short circuit close and latch, kA crest	329
f. Impulse withstand voltage, full-wave, kV, (BIL) crest..	110

g. Convection cooled

Dworshak Powerhouse Unit 3

a. Rated maximum voltage, kV, rms	15.5
b. Rated frequency, Hz	60
c. Rated continuous current, amperes, rms	11,200
d. Rated short circuit current, kA, rms	120
e. Minimum short circuit close and latch, kA crest	329
f. Impulse withstand voltage, full-wave, kV, (BIL) crest..	110
g. Fan cooled	

Dworshak Powerhouse Tie Breaker

a. Rated maximum voltage, kV, rms	15.5
b. Rated frequency, Hz	60
c. Rated continuous current, amperes, rms	7,000
d. Rated short circuit current, kA, rms	120
e. Minimum short circuit close and latch, kA crest	329
f. Impulse withstand voltage, full-wave, kV, (BIL) crest..	110
g. Fan cooled	

John Day Powerhouse Units 1-16

a. Rated maximum voltage, kV, rms	15.5
b. Rated frequency, Hz	60
c. Rated continuous current, amperes, rms	7,000
d. Rated short circuit current, kA, rms	120
e. Minimum short circuit close and latch, kA crest	329
f. Impulse withstand voltage, full-wave, kV, (BIL) crest..	110
g. Fan cooled	

McNary Powerhouse Units 1-14

a. Rated maximum voltage, kV, rms	15.5
b. Rated frequency, Hz	60
c. Rated continuous current, amperes, rms	4,000
d. Rated short circuit current, kA, rms	63

- e. Minimum short circuit close and latch, kA crest 173
- f. Impulse withstand voltage, full-wave, kV, (BIL) crest.. 110
- g. Convection cooled

The contacts and the insulating structures shall remain undamaged when rated impulse voltages are applied across open contacts.

2.1.1.2 Standards

Except as otherwise specified, the circuit breakers shall conform to the applicable requirements of the following IEEE Standards: C37.010, C37.011, and C37.012.

2.1.1.3 Rated Transient Recovery Voltage

Each circuit breaker shall meet the related required transient voltage withstand capabilities as described by paragraph 5.9 of IEEE C37.013.

2.1.1.4 Load Switching Capacity and Life

Required load switching capability and life shall be in accordance with IEEE C37.013, Paragraphs 5.8.3.2 and 5.10, and with the following:

- a. Each breaker shall be capable of performing without maintenance or adjustment, 10,000 no-load operations during time periods (between scheduled breaker maintenance) of up to 10 years, when operated under the specified service conditions.
- b. Each breaker shall be capable of interrupting cumulative load current of 5000% of rated current between maintenance intervals as required by IEEE Std C37.013, paragraph 5.8.3.2b, except that the Dworshak tie breaker shall be capable of 10,000% of rated current. Each breaker shall be capable of performing without maintenance, at least 3000 close-open (CO) operations under breaker continuous rated current.
- c. Each breaker shall be capable of performing without maintenance, three close-open (CO) operations at full rated interrupting currents. Procedures shall be in accordance with IEEE C37.013 (Table 11, test duty).

2.1.1.5 Rated Control Voltage

Rated control voltage ranges shall be 90-140 volts dc for the close control circuit, and 70-140 volts dc for the trip control circuit. Further, operation of the closing and tripping control circuits shall not produce transient overvoltages exceeding 1500 volts crest.

2.2 RETROFIT GENERATOR CIRCUIT BREAKERS

2.2.1 General

The retrofit breakers will replace three pole, air blast breakers. The retrofit circuit breakers shall be designed to connect at the through-bushings into the existing switchgear cubicles, which shall be retained. The circuit breakers shall utilize, to the extent possible, the existing circuit breaker cabinets including current transformers and door interlocks. When installed the breaker

will be dead front and enclosed. Louvers shall be provided as required for adequate ventilating and heat removal. The design and arrangement of equipment shall be such that adequate space and access is provided for wiring, inspection, and maintenance of the breakers. The design and construction shall be in accordance with IEEE C37.59 and IEEE C37.20.2 except that "glastic" type barriers may be used in lieu of metal barriers if clearance for BIL rating can not be satisfied with metal barriers.

2.2.2 Breaker

All three interrupter units, with the operating mechanism, terminal panel and all interconnecting components, shall be installed at the factory, on a permanent steel base fabricated from standard rolled shapes. With the breaker truck installed in the cubicle, the base shall be supported at four or more points as designated by the manufacturer. It shall be sufficiently rugged to withstand the shock of the most severe rated operating condition, and to maintain the correct alignment of the interrupter tanks and operating mechanism. Lifting facilities shall be provided for lifting the breaker assembly

2.2.3 Connections

The breaker shall be connected to the existing isolated phase bus disconnect switch bushings by means of flexible conductors. The conductors shall be designed, manufactured and when installed provide vibration isolation between the breaker and the existing bushings. All connections shall be silver-plated and bolted. Belleville washers shall be used on bolted flexible connections. Design criteria and calculations shall be submitted to demonstrate the adequacy of the connections while carrying rated continuous current and while carrying rated interrupting current. Procedures shall be provided to ensure proper bolt torque and Belleville washer compression.

2.2.4 Grounding

Non-energized portions of the circuit breaker interrupter poles, operating mechanism, and other major components shall be electrically bonded together, to a common conducting path, with electrical connections not subject to deterioration by environmental or operating conditions. Two grounding pads shall be provided, one at each end of the circuit breaker. Each shall have a minimum of two tapped holes with a matching copper or bronze, two-bolt minimum, clamp-type terminal for a stranded 500 kcmil copper conductor. Belleville washers shall be used on bolted flexible connections. Procedures shall be provided to ensure proper bolt torque and Belleville washer compression. Grounding pads and terminals shall comply with NEMA CC 1.

2.3 INTERRUPTERS

2.3.1 Interrupter Units

The interrupter units shall be equipped with modern and effective arc-extinguishing devices to quench the arc after current zero. The contact system shall be designed to minimize the wear of the current carrying contacts, such as separate contacts for normal current carrying conditions and interruptions. Design and materials shall permit severe operation with a minimum of maintenance.

2.4 OPERATING MECHANISM, CONTROLS AND AUXILIARIES

2.4.1 General

The three poles of each circuit breaker shall be operated simultaneously by a single operating mechanism from a common shaft. The operating mechanisms shall be nonpumping and electrically trip-free, in all positions of the closing stroke. The operating system capacity shall be sufficient to perform repeated operating cycles, using a combination of initial stored energy and recharged stored energy, as required below, without misoperation or thermal or mechanical damage. The circuit breaker, operating mechanism and control design shall permit any close or trip switches to remain closed for any length of time without causing damage. Components, circuitry and connections for local controls, for remote control and monitoring, for external power sources for operating, controls shall be provided as described below. A common SF₆ gas system shall be provided to monitor, sample, remove and refill the gas from the interrupter poles. The system shall normally interconnect all three poles by means of a common gas piping header, yet shall allow isolating any single or pair of interrupter poles while monitoring, sampling or processing the remaining pole(s).

2.4.2 Operating Mechanisms

2.4.2.1 General

The operating mechanism shall be designed to provide continuous operating force through the entire range of motion, in either breaker close or open direction. The mechanism shall be designed and manufactured to withstand all operating stresses, and bearings, pins, bolts, nuts and other connections shall be locked and pinned in a manner to prevent loosening or change of adjustment. The operating mechanism shall not require critical adjustments, and failure of any spring (other than the operating energy storage spring, where applicable) shall not prevent tripping nor cause tripping or closing of the circuit breaker.

All bearings which require periodic applications of grease shall be equipped with pressure-type grease fittings unless otherwise approved by the Government. The mechanism shall be fitted with an approved time-travel recorder transducer compatible with the particular circuit breaker motion analyzer used at each Project. Many, but not necessarily all, of the Projects use Doble TR1A or TR 3000 Analyzers

2.4.2.2 Capacity

The operating mechanism shall be capable of performing the following operating sequences without thermal or mechanical damage, while the circuit breaker is operating at rated short circuit current and related required capabilities:

- a. The standard ANSI duty cycle of Close-Open, 15 seconds, Close-open.
- b. Each hydraulically operated breaker shall be able to repeat indefinitely: Close, 10 seconds, Open-Close-Open, 20 seconds, Close-Open, 30 seconds, Close-Open, 30 minutes. At the end of this cycle, the energy system shall be fully charged, ready to repeat more cycles. The mechanism shall have provisions for manually recharging the system.

c. Each motor-charged spring operated mechanism shall meet the duty cycle of Open-Close-Open, 30 seconds, Close-Open. At least 5 successive Close-Open operations shall be possible without overloading the spring charging motor. The mechanism shall have provisions for manually charging the spring.

2.4.2.3 Energy Supply and Storage Means

The pump unit or spring charging system, including motor, shall be in a cabinet with or separate from that for the operating mechanism. Hydraulic pumps shall be air-cooled. OSHA type guards shall be provided on operating mechanisms, belts, and pulleys, adequate for personnel and equipment protection during both operation and maintenance. An approved, lockable device shall be provided to prevent operation of the mechanism when maintenance work is being done. All filters furnished shall be of types for which replacement and renewal parts are commercially available in the United States. Fluid lines shall have sufficient fittings for easy removal of valves and disconnection of lines from all major mechanism and breaker parts. Pressure relief valves shall be provided for all pressurized systems.

2.4.2.4 Special Requirements for Hydraulic Mechanisms Only

The circuit breaker shall be closed and opened by hydraulic operation of the mechanism. Means shall be provided at the mechanism housing which will permit manual operation of the hydraulic valves for hydraulically opening or closing the breaker at normal speeds. Each mechanism shall be provided with its own pump equipment, consisting of an oil reservoir, oil pump, suitable oil filter, accumulator, pressure gage, necessary controls, piping, and valves. The accumulator may be located in the housing or adjacent to it. Each hydraulic mechanism shall have provisions to permit adjustment of the accumulator precharge pressure with a standard hose and gage assembly. Each hydraulic mechanism shall include a shutoff valve between the main reservoir and pump, or other provisions to permit the removal of the motor and pump for maintenance without draining the oil from the main reservoir. At least one reservoir on each system shall be located to provide a positive head on all points of the system, to prevent the entrance of air, or the system shall be designed to function with air present, without misoperating at any time, while either running or idle.

2.4.2.5 Special Requirements for Electric Motor Driven Spring Mechanisms Only

The state of charge shall be clearly visible by spring position indicators. Spring charge shall occur only after a close operation, or, an adjustable delay (0 to 2s) may be provided to allow staggered recharge between multiple breakers at a given site.

2.4.3 Gas Monitoring and Service System

All gas compartments shall be monitored in normal operation. The monitoring system shall consist of temperature compensated pressure switches (density relays) with adjustable contact operation settings, pressure gauges, gas sample valves, and other devices necessary to verify and maintain the system's integrity.

2.4.4 Controls, Indication and Alarms

2.4.4.1 General

a. The control scheme shall be as shown on the drawings and as described herein, and shall be complete with all features necessary to perform local and remote closing, tripping, and testing, as well as to automatically provide for safety, and remote indication and alarms, except where indicated otherwise below. The required controls shall be conveniently grouped for breaker operation from a common control cabinet mounted on the outside of the existing cubicle.

b. A "Local-Remote" transfer switch and a breaker control switch shall be provided and mounted in the control cabinet. The circuit breaker shall be designed to initiate normal closing or opening by remote contacts, only when the transfer switch is in the "Remote" position. The breaker control switch shall control local electrical closing and opening of the circuit breaker only when the transfer switch is in the "Local" position.

c. The circuit breaker controls shall be provided as required herein, to close contacts for remote alarms, and to prevent breaker closing, and to either initiate or prevent tripping, when system pressures (operating or dielectric) progressively decrease to abnormal values.

d. All controls and indicators used by a powerhouse operator shall be adequately insulated or protected to prevent inadvertent human contact with the energized circuit.

e. The trip circuit shall be isolated from all other circuits. All external connections for the trip circuit, including power, shall be terminated on terminal block points separate from those of other circuitry. Any interconnections with other control circuits shall be made from those terminal points only, rather than within the trip circuit.

f. A capacitive trip device supplied from an AC lighting panel shall be provided to trip the breaker on loss of dc control power when the breaker control switch is in the "Remote" position.

g. Two separate and independent trip coils shall be provided. Each coil shall be monitored by a its own indicating light. The light shall be lit to indicate all trip permissive contacts are closed and the trip coil is continuous. Both trip coils shall be energized during remote tripping. One coil shall be used for local tripping and the other shall be connected to the capacitive trip device.

h. Two dc molded case switches shall be provided in the control cabinet to allow disconnection of breaker control power and breaker fail-to-open relaying.

2.4.4.2 Indication, Monitoring, and Alarms

a. Switch contacts. Contacts for internal circuit breaker controls shall be rated for greater than the most severe duty they will experience. Contacts for connection to remote circuits shall be rated for service on a 125 volt dc ungrounded system, and on a 120 volt single phase ac grounded or ungrounded system. Continuous current rating shall be 15 amperes minimum. Minimum inductive interrupting ratings shall be 0.5 ampere for 125 V dc duty, and 10 amperes for 120 or 240 V ac duty. All specified contacts, including spare contacts, shall be terminated on separate points on terminal blocks located together in a common accessible area within the control cabinet.

b. Indication. The following mechanical indication shall be provided. Unless noted otherwise, the indicators shall be easily readable from the outside front of the operating cabinet.

(1) Circuit breaker position. These indicators shall give positive information of the position of the contacts, whether closed, open, or in an intermediate position.

(2) Operation counter. The counter shall be directly operated by the mechanism when the circuit breaker opens, and shall not be affected by cycling power to control circuits. The counter shall be non-resettable.

(3) Spring charge indicator for any springs used to store operating energy. This may be located within a housing, but shall be otherwise easily readable when the housing door is open.

(4) A pressure gauge for each operating pressure system.

(5) The control circuit for each motor shall be provided with a non-resettable, elapsed time meter which displays the motor's accumulated hours of operation.

c. Auxiliary Switches. Each circuit breaker mechanism shall be equipped with one or more auxiliary mechanical switches which operate as the breaker closes and opens. Contacts shall be electrically independent, silver plated or of silver alloy, self-aligning and shall close with a wiping action. The auxiliary switch shall have at least 18 independent contacts in addition to those specified elsewhere or required for normal circuit breaker control. Each of these additional contacts shall be of a type which can be changed between form "a" and form "b", with respect to circuit breaker position, or optionally, at least 9 "a" and 9 "b" non-interchangeable contacts may be substituted for the specified 18 contacts.

d. Automatic Controls and Alarms. Automatic controls and alarms shall not respond to momentary conditions during normal operation of the breaker, such as brief pressure changes. Contacts for remote alarm indication shall each be electrically isolated from all other contacts, and shall respond to alarm conditions by closing. The following functions shall be provided for response to:

(1) Reduction of gas density in the SF₆ gas insulating system. At least two independent adjustable density monitor switch stages shall be provided. The first stage shall contain a contact to alarm remotely when the gas density decreases to a safe but abnormally low value. The second stage shall contain one or more electrically independent contacts as required which operate when gas density becomes too low for safe interruption of rated short circuit current. These second stage contacts shall trip the breaker, prevent closure, and alarm remotely. The second stage shall be capable of reconfiguration by wire changes and readjustment only, to prevent closure, prevent tripping, and alarm remotely.

(2) In the operating system:

(a) Low operating pressure (or other stored energy). For hydraulic operating mechanisms, three switch stages shall be provided to operate when the pressure drops below the mechanism's rated operating pressure range. The first stage shall contain a contact to alarm remotely when the operating pressure is between 95 and 98 percent of rated. The second stage shall contain contacts as required to prevent circuit breaker closing, and a contact

to alarm remotely, just before the pressure is insufficient to close and safely open the breaker at rated short-circuit current. The third stage shall contain contacts as required to trip the breaker, prevent closure, and alarm remotely just before the pressure is insufficient to safely open the circuit breaker at rated short circuit current. The third stage shall be capable of reconfiguration by wire changes and readjustment only, to prevent breaker tripping, and alarm remotely.

(b) Remote alarm for loss of electrical power to the control circuits.

(3) Trip, disable closing, and remote alarm for incomplete operation, when a close or open operation does not complete within an acceptable time interval.

(4) Remote alarm for excessive run time for the energy storage system.

(5) Remote alarm for loss of electrical power to the charging motor for the operating mechanism.

2.4.4.3 Key Interlocks

The retrofit circuit breaker shall maintain the existing key interlock equipment design. The key interlock design will prevent operation of its isolating disconnecting switches and cubicle doors when the circuit breaker is closed, and to prevent operation of the circuit breaker unless the disconnecting switches are locked open or locked closed.

2.4.5 Cabinets

2.4.5.1 Control Cabinet

The control cabinet shall be self contained and mounted on the outside of the existing circuit breaker cubicle. All operating mechanisms for circuit breakers, including tripping and closing mechanisms, relays, local test and transfer switches, circuit breakers for control and supply circuits, auxiliary switches, compressors or pumps, motors, starters, heaters, gauges, terminal blocks and other necessary equipment shall be enclosed in ample size cabinets. All incoming and outgoing cables along with existing internal wiring including current transformer leads shall be routed to the cabinet. The cabinet shall allow easy access to terminal blocks.

2.4.5.2 Identification

One or more permanent, noncorroding circuit breaker nameplates in accordance with IEEE C37.04, Paragraph 7, shall be provided, mounted in a conspicuous location.

2.4.6 Electric Supply

The circuit breaker electrical power systems shall be designed to operate properly from the supply sources. Devices shall be capable of functioning through the ranges of voltages given in Table 9 of IEEE C37.06. Maximum continuous current in each circuit shall not exceed 15 amperes. The stored operating energy charging system shall be designed for 120 volts ac, except that if the operating energy is provided by a motor-wound spring, the charging system shall be designed for a 125 volts dc ungrounded source. Circuit breaker control, monitoring and alarm circuits shall be designed for 125 volts dc, ungrounded, with circuit common at negative polarity, and "line" side positive.

2.4.7 Low-Voltage Wiring Switching and Protection

The following devices shall be provided in the control cabinet for the circuits served:

- a. For the 125-volt dc close and trip circuits, a 2-pole non-automatic circuit breaker, minimum frame size 100 amperes.
- b. For the operating mechanism's stored energy charging equipment, a non-automatic circuit breaker with a pole only for each ungrounded line, and separate coordinated circuit protection for the charging motor, and any other auxiliary circuits.

2.4.8 Internal and Remote Connections

2.4.8.1 Terminal Blocks

All wiring between cabinets and external devices shall be terminated on terminal blocks after entering the cabinets. All specified additional features of equipment, such as spare contacts, shall each be wired to separate terminal block points. Any devices furnished with leads rather than terminals shall have the leads terminated on terminal blocks. Terminal blocks for specific equipment or groups of equipment shall be near that equipment in an accessible location. Terminal blocks for external wiring shall be grouped in a common area, preferably near the incoming conduit penetrations, with ample space for connecting external cables. At least ten percent of the total quantity of terminal block points shall be provided as additional spares. The spare terminals shall be located in large groups.

2.4.8.2 Wire and Cable Designations

The wire (terminal point) designations used on the Contractor's wiring diagrams shall be printed on the terminal block marking strips. The Government will mark the wire and cable designations, for identification of remote (external) circuits, on prints of the Contractor's terminal connection drawings submitted for approval. These drawings will be returned to the Contractor who shall add these designations to the tracings and to the terminal block marking strips. Each conductor termination shall be identified with the wire designation on a non-metallic tube-type marker on the conductor. Installed markers shall be uniform in position on the wires, and legends shall be visible when wires are terminated on terminal blocks or equipment.

2.5 MATERIALS

All articles, materials and equipment shall be the standard products of manufactures regularly engaged in the manufacture of these products and shall essentially duplicate items that have been in satisfactory use for at least two years prior to bid opening. Materials and equipment shall conform to the requirements of these specifications and to the additional requirements specified herein. Materials, components, and equipment shall be of high quality, free from defects and imperfections, of recent manufacture, and of the classification and grades designated. Particular care shall be taken to provide materials and equipment with long life, liberal factors of safety, and suitable operating characteristics for the intended use. All materials, components, and equipment not manufactured by the Contractor shall be products of other recognized reputable manufacturers. The products of manufacturers other than those specified herein will be accepted when it is proved to the satisfaction of the Government that such products are adequate and suitable for the intended use. Upon request, the Contractor shall furnish to the Government for approval of the names of all such other manufacturers,

together with complete pertinent information regarding all such products which he proposes to incorporate in the work. Samples of materials and equipment shall be submitted for approval when so directed. Devices and equipment used for the same or similar services shall be of the same make and type, and shall be interchangeable when of the same rating.

2.6 TEST OF MATERIALS

2.6.1 General

All materials, supplies, and parts and assemblies thereof entering into the work to be done under these specifications shall be tested in accordance with the requirements of the standard specifications specified herein, except as otherwise indicated or where such tests are waived in writing. In case the Contractor desires to use stock material not manufactured specifically for the work covered by these specifications, evidence satisfactory to the Government that such material conforms to the requirements of these specifications shall be submitted, in which case detailed tests of these materials may be waived.

2.6.2 Quality Control

Unless waived in writing, all tests or trials shall be made in the presence of a Government quality assurance representative (GQAR). Five copies of all test reports shall be submitted. The test reports shall be furnished as soon as practicable after the tests are made and shall be submitted in such forms as to provide means of determining compliance with the applicable specifications for the material tested.

2.6.3 Marking

Test specimens and samples for analysis shall be plainly marked to indicate the materials they represent and, if required, they shall be properly boxed and prepared for shipment.

2.6.4 Cost

Except as provided elsewhere, all costs of all tests and trials, excepting the pay and expense of the GQAR shall be borne by the Contractor and no separate payment will be made therefor.

2.7 MOTORS

The motors for hydraulic pumps shall be single-phase 60Hz induction type designed for across-the-line starting and suitable for operation on 115 volts ac power supply. The motors for spring charging shall be nominal 125-volt dc types designed for across-the-line starting and suitable for operation through a range of 90 to 140 volts dc. Each motor shall either be capable of continually withstanding locked-rotor current without damage, or shall be provided with manually reset thermal overload protection in each ungrounded line. The motors shall conform to the applicable provisions of NEMA MG 1 and the motor controls shall comply with the applicable provisions of NEMA Nos. ICS 1 and ICS 2.

2.8 LOW-VOLTAGE ELECTRICAL CONNECTIONS

2.8.1 Control Wiring

2.8.1.1 Wiring

Wiring within the operating mechanism housing, control cabinets, and terminal cabinet shall be neat and orderly in horizontal and vertical runs with 90 degree bends, with minimum tension or other stress on the insulation, without splices and securely held in place with cleats and straps. Leads to other devices external to the control cabinet, where not installed in channels or ducts, shall be formed into compact wire bundles suitably bound together and properly supported. Bindings and supports shall not cause damage or cold flow to the insulation.

2.8.1.2 Insulated Wire

Insulated wire shall be Underwriters Laboratories listed, type SIS, in accordance with UL 44, except where heater circuit wire may require greater thermal withstand capacity. In such exceptions, the insulation shall be non-asbestos, flame retardant, moisture and heat resistant and suitable for the maximum expected conductor temperatures. Insulated wire shall meet UL 1581 VW-1 flame test requirements. All wires shall be single conductor, of stranded coated annealed copper, insulated for not less than 600 volt service. Conductors shall be Class B or Class C stranding, except for hinge wire which shall be Class K stranding. Conductor size shall be not less than No. 14 AWG, except for current transformer secondary leads, which shall be not less than No. 10 AWG. All connections to device terminal studs or blocks shall be made with pressure indented terminals. Short, well protected and well supported runs of smaller wire sizes may be used only if specifically approved for each application, and only for internal functions which retain at least a 30% safety factor in wire ampacity.

2.8.1.3 Wire Markers

Wire markers for conductor termination identification shall be approved tube-type suitable for contact with rubber, neoprene or plastic. Tubing shall be sized to fit the wire being marked and shall have black marking on a lighter colored background. A written certificate from an approved independent testing laboratory shall be furnished to indicate that the markers will not stain or discolor after 20 years service when subjected to an accelerated aging test while in contact with wire insulating materials.

2.8.2 Terminal Blocks

Terminal blocks shall be rated for not less than 600-volt service and shall be of one piece molded construction with integral barriers similar and equal to Westinghouse Moldarta Type, General Electric Company type EB-25, or Marathon Special Products Corporation Series 1500. Control leads shall terminate at States Company Type NT disconnecting type terminal blocks or approved equal. Separate short-circuit terminal blocks shall be provided for the current transformer secondary wiring connections. Terminal block materials and components shall not be damaged by moisture, gases, oil or other fluids which may be present. Substantial permanent marking strips shall be provided on all terminal blocks, suitable for engraving or other legible and permanent markings. The marking strips shall be engraved with the conductor designations used on the approved shop drawings, and filled with enamel, or other equally legible and permanent markings. One spare blank marking strip shall be furnished for each terminal block.

2.9 STRIP HEATERS

Heaters shall be rated 240 volts, single phase, 60-Hz but will operate on a 120-volt ac supply. The number and capacity of heaters in each compartment shall be sufficient to prevent condensation at 45°F ambient temperature operating at 120 volts. Heater shall be strip type constructed with a chrome-nickel heating element embedded in a refractory insulating material, and encased in an approved watertight, corrosion-resisting nonoxidizing metal sheath or silicon rubber. The rate of heat dissipation shall be uniform throughout the effective length. Watt density shall not exceed 12 watts per square inch for silicon-rubber-type heaters or 20 watts per square inch for chrome-nickel type. Thermostats shall be adjustable through a minimum range of 50-90 degrees F and minimum contact rating shall be 10 amperes at 120 volts ac. The heaters and thermostats shall be accessible for ease of inspection and maintenance.

2.10 AIR CIRCUIT BREAKERS (MOLDED-CASE TYPE)

2.10.1 General

Circuit breakers and molded-case switches for the dc control and the ac circuit breakers for the operating mechanism motor, receptacle, and space heater circuits shall conform to the applicable requirements of UL 489, shall be heavy-duty type fully rated, and shall have voltage ratings and interrupting ratings hereinafter stated. The circuit breakers shall be manually operated and shall have trip free operating mechanisms of the quick make, quick break, type. All poles of each breaker shall be operated simultaneously by means of a common handle, and they shall be enclosed in a common molded plastic case. The contacts of multi-pole breakers shall open simultaneously when the breaker is tripped. The operating handles shall be provided with a means of indicating clearly whether the breakers are in the "On", "Off", or "Tripped" position. The circuit breakers shall be of the individually mounted, stationary type, shall be products of only one manufacturer, and shall be interchangeable when of the same frame size. Each circuit breaker shall be provided with mechanical pressure type terminal lugs for single conductor stranded copper cables of the size required by the specifications or shown on the drawings. Requirements for dc molded-case switches are as for dc circuit breakers except that the operating handle is two position, "On-Off", and no trip unit is used.

2.10.2 Trip Units

The circuit breakers shall be of the automatic type provided with combination thermal and instantaneous magnetic trip units, unless otherwise specified. Instantaneous magnetic trip units shall be set at approximately ten times the continuous current ratings of the circuit breakers.

2.10.3 AC Air Circuit Breakers

Air circuit breakers for 120-volt and 240-volt ac circuits shall be rated not less than 120/240 or 240 volts ac, and shall have a minimum interrupting capacity of 10,000 symmetrical amperes.

2.10.4 DC Air Circuit Breakers

Air circuit breakers for 125-volt dc circuits shall be two-pole type rated 125/250 or 250 volts dc, and shall have a minimum interrupting capacity of 5,000 amperes dc. The minimum frame size shall be 100 amperes.

2.11 PIPING

The oil and gas lines shall be of suitable strength for the pressures to which they are subjected and shall be supported in a manner which will prevent excessive vibration. The oil and gas lines shall be provided with sufficient unions to allow easy removal of all valves and the disconnecting of the lines from all components of the mechanism, without requiring flexing of the lines. All parts of valves and other components such as packing and seat inserts shall be of material suitable for use with their contained fluids in an outdoor environment, which will not deteriorate, harden or warp with age. The metal parts of all valves shall be of corrosion-resistant material, preferably bronze or stainless steel.

2.12 SULFUR HEXAFLUORIDE GAS (SF₆)

2.12.1 Quality and Certification

All SF₆ gas required to fill the circuit breakers to the proper operating pressures, the gas required for factory tests, and spare gas as specified in SPARE PARTS, shall be furnished. A material safety data sheet for the gas conforming to OSHA guidelines shall be included with the operating and maintenance manual. Prior to shipment of the circuit breakers, certification shall be submitted in duplicate that the gas furnished for the breakers will meet the requirements specified below.

2.12.2 Chemical, Physical and Electrical Characteristics

The insulating SF₆ gas shall meet the requirements of ASTM D 2472 except that the water content (maximum dew point), shall be minus 60° C with only 11 ppm water by volume and the minimum purity shall be 99.9 percent by weight. The Government, at point of delivery, may draw samples for testing to determine whether the SF₆ gas meets the specifications. SF₆ gas so tested and failing to meet the requirements will be removed and replaced by and at the expense of the Contractor.

2.12.3 Sampling

Samples for testing shall be obtained as specified in ASTM D 2472.

2.12.4 Testing

Chemical, physical, and electrical tests shall be conducted by the Contractor in accordance with ASTM D 2472. Certified copies of the test reports shall be submitted prior to shipment of the gas.

2.13 COPPER TUBING

Copper tubing shall conform to the requirements of ASTM B88

2.14 CONDUIT

Rigid steel conduit shall conform to NEMA C80.1 and shall, in addition, be zinc-coated (galvanized) both inside and outside by the hot-dip method. Fittings for rigid metal conduit shall conform to NEMA FB1. Conduit outlet boxes and bodies shall be galvanized cast iron, galvanized malleable iron or cast aluminum conforming to the requirements of NEMA FB 1, type

and style as required. Short lengths of liquid-tight flexible metal conduit conforming to the requirements of UL-360 may be used for connection to auxiliary devices subject to approval. Fittings for flexible conduit shall provide positive bonding.

2.15 THREADED FASTENERS AND JOINTS

Threads for all electrical, mechanical or structural, permanent or temporary connections to external devices shall meet the following requirements, or adapters shall be provided where practical. All bolts, studs, machine screws, nuts, and tapped holes shall be in accordance with ASME B1.1. Threads for sizes 1/4 inch to 1 inch, inclusive, shall be NC or UNC series. The sizes and threads of all valves, pipe and fittings, conduit and fittings, tubing and fittings, and connecting equipment, shall be in accordance with ASME B1.20.1. Manufacturer's standard threads and construction may be used on internal items.

2.16 WELDING

All welding shall be performed by the electric-arc method, by a process which will exclude air from the molten metal and, where practicable, under procedure control using automatic machines. The design and construction of welded joints shall conform to the requirements of Part UW of section VIII of the code, or to AWS D1.1 as applicable. After being deposited, welds shall be cleaned by shot-blasting unless otherwise approved, and shall show uniform sections, smoothness of weld metal, feather-edges without overlap, and freedom from porosity and inclusions. Visual inspection at the edges and ends of welds shall indicate complete fusion with the base metal. Particular care shall be taken in aligning and separating the edges of members to be joined by butt welding, so that complete penetration and fusion for the full depth of the joint will be assured. All pinholes, cracks, and other defects shall be repaired by chipping or grinding the defect to sound metal and rewelding. Where fillet welds are used, the members shall fit closely and shall be held together during welding. The welding rods used for manual welding shall be suitable for the position in which the welding is performed.

2.17 PAINTING

All surfaces shall be thoroughly cleaned by sand blasting or shot blasting before painting. The interior surfaces of cabinets shall be finished with not less than one prime coat and one light-colored finish coat of enamel. All exterior surfaces, including cabinets, exposed mechanisms, raceways and piping, shall be given a rust inhibitive primer coat and two finish coats of enamel. The enamel used for the finish coat shall be of weather-resisting properties and shall be ANSI Indoor Light Gray No. 61 in color, or if approved, the manufacturer's standard color. All finished metalwork shall be suitably wrapped or otherwise protected from damage during shipment and installation. Adequate paint of the same color and type shall be provided for touch-up of damage after installation.

2.18 GALVANIZING

All galvanizing required in these specifications shall be by the hot-dip method, in accordance with ASTM A123 for fabricated products and structural shapes, and in accordance with ASTM A153 for hardware items.

2.19 TOOLS AND ACCESSORIES

The Contractor shall furnish a complete set of all special tools, lifting devices, templates, jigs, wrenches, any items recommended or cited in the maintenance instructions, for installation or maintenance including interrupter removal and replacement, or other equipment which may be necessary or convenient for assembling or disassembling the circuit breakers. Any accessories and appliances that are regularly furnished with this class of apparatus or that may be necessary for the satisfactory installation, adjustment and maintenance thereof shall be furnished regardless of whether such accessories or appliances are specifically called for in these specifications. The accessories shall include the following:

- a. One SF₆ gas leak detector (TIF Instruments TIF5500 or, similar and equal) Note: Only one required per project.
- b. A manual operating device. The manual operating device shall be a complete portable device of a type which can be attached and operated easily by one person.
- c. Suitable wrenches to fit all cap screws, bolts, nuts and any special fasteners, which are of other than ANSI standard dimensions.

2.20 SPARE PARTS

2.20.1 General

The following parts, in the quantities indicated, comprise a set of spare parts for a SF6 Retrofit Breaker Assembly. All parts included in a set of spare parts shall be duplicates of the original parts furnished and interchangeable therewith. All spare parts shall be packed separately in containers plainly marked 'SPARE PARTS'. A packing list listing the contents of each container and contract number shall be placed in a moisture proof envelope and securely fastened to the outside of the container.

2.20.1.1 Circuit breaker parts as follows:

- a. 3 - Pole assemblies, each complete as required, for a complete 3-pole breaker.
- b. 5 - Sets of gaskets for a 3-pole breaker.
- c. 5 - Sets of O-rings and seal rings for a 3-pole breaker.
- d. 2 - Density monitor gauges and switch assemblies
- e. 1 - Lot of SF₆ gas sufficient to fully charge one circuit breaker. Bottle(s) shall become the property of the Government.

2.20.1.2 Parts for all operating mechanisms as follows:

- a. 1 - Set of relays consisting of one relay of each type and rating used.
- b. 1 - Closing coil.
- c. 1 - Trip coil.

- d. 1 - Set of cutoff switches and accessories.
- e. 1 - Set of latch devices (if required).
- f. 1 - Control or selector manual switch of each type provided.
- g. 1 - Set of auxiliary switches.
- h. 1 - Pressure switch of each type provided.
- i. 1 - Gauge of each type provided.
- j. 1 - Set of heaters.
- k. 1 - Thermostat of each type provided.
- l. 2 - Terminal blocks of each type and size provided.
- m. 1 - Low-voltage circuit breaker and contractor of each type provided.
- n. 1 - Set of operating mechanism gaskets, seals and any sealing compounds needed.
- o. 1 - Set of rupture discs.
- p. 1 - Safety relief valve of each type.
- q. 1 - Spare motor and drive mechanism for spring charging.

2.20.1.3 Parts for hydraulic operating mechanism only as follows:

- a. 1 - Unmounted pump and motor.
- b. 1 - Accumulator.
- c. 16 - Sets of oil filters of each type required for one circuit breaker.

PART 3 EXECUTION

3.1 CIRCUIT BREAKER TESTS

3.1.1 General

Each circuit breaker shall be given manufacturer's routine shop tests and also other electrical and operating tests as specified below. In preparation for testing, each breaker shall be completely assembled into a single 3-pole unit, with interrupter poles, operating mechanism and housings, and with inter-pole conduit, connecting rods, installed, with all adjustments made and ready for operation. The factory test equipment and the test methods used shall conform to the applicable requirements of ANSI, IEEE and NEMA Standards, and shall be subject to the approval of the Government. All tests required herein shall be performed at the factory and they

shall be witnessed by the Government Quality Assurance Representative (GQAR) unless waived in writing. No equipment shall be shipped until approved by the Contracting Officer. The Contractor shall notify the Government sufficiently in advance of the date of the tests so that arrangements can be made for the GQAR to be present at the tests. The Contractor shall furnish five certified copies of all test reports, including complete test data on all tests. The test data shall include: serial number identification of each item tested, date(s) when test was performed and key personnel present, a brief description of the test equipment and procedure used, the test criteria, and the values observed (corrected if necessary). Certification shall be by the GQAR (when present), and by a responsible member of the manufacturer's engineering or quality control organization. The cost of performing all tests shall be borne by the Contractor. The following tests shall be performed or shall have been previously performed on representative circuit breakers or on each circuit breaker, as specified below. Where conditions of two or more tests are identical, they may be performed simultaneously, unless a specific sequence is required. Where a more severe required test fully demonstrates capability to withstand a less severe test, and if the less severe test is waived in writing by the Government the lesser test need not be performed. Tests of standard rated interrupting and dielectric performance shall be performed at the first gas density alarm point rather than at full density, except that maximum interrupting current tests shall also be performed at maximum gas density. The insulating gas used in the breaker for the tests shall be furnished by the Contractor and shall be as specified in paragraph 2.12.

3.1.2 Design Tests

Design tests shall have been performed on circuit breakers identical to those furnished under this contract. Proof of adequacy of design shall be by certified reports of previously performed tests, or of tests which will be performed. If any design tests are performed on circuit breakers or components to be furnished under this contract, the affected items shall be inspected after testing to insure that no damage or wear has occurred. Any items which may have had the lifetime and reliability expected of new and unused equipment degraded by the tests shall be replaced, or if approved, repaired. Applicable production tests shall be performed on the circuit breaker or components after they have been subjected to design tests, and needed replacements or repairs have been made. Design tests shall be as described in IEEE C37.09 as applicable for the specified ratings of the circuit breakers to be furnished under this contract.

3.1.3 Production Tests

3.1.3.1 General

Each circuit breaker shall be given production tests in accordance with the applicable requirements of IEEE C37.09 and with the following:

3.1.3.2 Pressure Tests

The pressure testing required by the cited standards shall be performed before the required dielectric tests are performed. Each circuit breaker interrupter pole shall be subjected to a hydrostatic pressure of not less than one and one half times the design pressure for not less than 15 minutes.

3.1.3.3 Dielectric Tests

Wherever the option of substituting dielectric tests on component parts for those on completely-assembled circuit breakers is allowed in the standards, tests shall be performed on completely-assembled circuit breakers.

3.1.3.4 Circuit Breaker Operation Tests

a. The operating mechanism shall be thoroughly checked for proper operation and all necessary adjustments shall be made. The operating mechanism shall be tested and adjusted while operating the assembled breaker. Adjustments shall be made with all components of the breaker loaded equivalent to the final contact and accelerating spring load of the breaker.

b. Each operating mechanism shall be given a minimum of 5 closing and 5 opening operations by electrical control at each of the minimum, rated, and maximum control voltages, corresponding to the voltage ranges listed in IEEE C37.06 for 125-volt dc rated control voltage. These shall be repeated for nominal, maximum, and minimum operating pressures for hydraulic or pneumatically-operated breakers, and at maximum SF₆ gas pressure as well as minimum allowable SF₆ gas pressures for reliable closing and tripping.

c. Operating speed recordings shall be made of the closing time, opening time, trip-free operation time of all breakers. The above tests shall be made during each of the required operating tests at the specified voltages and pressures, and shall be made by use of a Cincinnati Circuit Breaker Operation Analyzer, Programma Vanguard Circuit Breaker Motion Analyzer, or other equivalent equipment.

3.1.3.5 Control Circuit Dielectric Tests

All control circuits and devices shall be given, in addition to the standard required dielectric tests, a 2500 volt surge withstand capability test. This test shall be in accordance with IEEE C37.90, Section 9.

3.2 SF₆ GAS TESTS

The SF₆ gas used for filling the circuit breakers, both for testing and for in-service use, shall prior to use be sampled according to ASTM D 2472, and tested to verify that the requirements of paragraph 2.12 SULFUR HEXAFLUORIDE GAS (SF₆) are met. The test reports shall include the sampling procedure and any further processing performed on the SF₆ gas since the samples were taken.

3.3 (DELETED)

3.4 CONTRACTOR-FURNISHED TRAINING OF GOVERNMENT PERSONNEL

After the first circuit breaker has been placed in service at a Project, the Government will require the Contractor to conduct one or more one week (five-day) training sessions covering SF₆ Circuit Breaker theory, operation and maintenance. The course will be conducted at the Project site in Government furnished facilities. The Contractor shall be responsible for providing qualified instructors, instruction materials and training aids. The number of sessions and participants, time and specific location will be negotiated under the task order providing for the training. The course shall include circuit breaker design and theory of operation, construction of

the actual breakers furnished, routine maintenance, trouble analysis, any special shipping and handling procedures, gas sampling and processing procedures, and safety precautions. Demonstrations shall be on the actual circuit breakers and equipment furnished, to the maximum extent possible. Major overhaul procedures shall be covered briefly, with greater emphasis on emergency procedures. Course material shall use to the maximum extent possible, the site-specific operation and maintenance data specified in Section 01782 OPERATION AND MAINTENANCE DATA. The Government may videotape the training sessions for future use.

3.5 INSTALLATION

The requirements for installation are covered under Section 16050 SF6 GENERATOR CIRCUIT BREAKER INSTALLATION.

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